

BARNES DISTRIBUTION

Synonyms: CA12201 C122060 C122062 C122064 C122065 C122066 KP74705 301380 301390 301410 301420 301430 301440 301450 301460 301470 301480 301500 301510 301530 301540 301550 301560 301570 301580 301590 301600 301620 301630 301650 301660 301670 301680 301690 301700 301710 301720 302240 305010 305020

MATERIAL SAFETY DATA SHEET
ALUMINUM OXIDE SHOP ROLLS COATED ABRASIVES

-----SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

MSDS Name: ALUMINUM OXIDE SHOP ROLLS COATED ABRASIVES

Product CAS: (none)

Product Code:

Synonyms: 301380; 301390; 301410; 301420; 301430; 301440; 301450; 301460; 301470; 301480; 301500; 301510; 301530; 301540; 301550; 301560; 301570; 301580; 301590; 301600; 301620; 301630; 301650; 301660; 301670; 301680; 301690; 301700; 301710; 301720; ALUMINUM OXIDE SHOP ROLLS COATED ABRASIVES

Company Identification:

Name: BOWMAN DISTRIBUTION

Address: 1301 E. 9TH ST., ST. 700

Address:

City: CLEVELAND State: OH Zip: 44114

For information, call: HEALTH ISSUES AND TECHNICAL INFORMATION (8AM-5PM ET): 1-216-416-7200 X 5860

Emergency Number: ROCKY MOUNTAIN POISON CONTROL CENTER (24 HOURS EVERYDAY): 1-303-623-5716

Emergency Agency: CHEMTREC (24 HOURS EVERYDAY):
Number: 1-800-424-9300

MSDS Creation Date: 2/18/2011

Supersedes Date: 4/1/2008

-----SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS -----

Chemical Name	CAS	MIN	MAX
ALUMINUM OXIDE (AL2O3)	1344-28-1	13	60
COTTON CLOTH	(none)	10	70
ANIMAL GLUE AND/OR PHENOLIC RESIN	(none)	5	30
SILICON CARBIDE	409-21-2	0	0
NYLON FIBERS	(none)	0	0
CURED ADHESIVE RESINS	(none)	0	0

Miscellaneous:

HAZARDOUS INGREDIENTS

INGREDIENTS

CAS NUMBER

COTTON CLOTH

NONE

ANIMAL GLUE AND/OR PHENOLIC RESIN

NONE

NOTE: SEE BELOW FOR EXPOSURE LIMIT DATA FOR THESE INGREDIENTS

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EXPOSURE CONTROLS

INGREDIENT	OSHA PEL	ACGIH TLV
ALUMINUM OXIDE (AL2O3)	15 MG/M3 TOTAL DUST	10 MG/M3 TOTAL DUST
SILICON CARBIDE	N.E.	N.E.
NYLON FIBERS	N.E.	N.E.
CURED ADHESIVE RESINS	N.E.	N.E.
Lbs of VOC per Gallon Coating (minus water):	0	
Coating Density (lbs/gal):	0	
Solvent Density (lbs/gal):	0	
Percent Solvent (volume):	0	
Percent Solids (volume):	0	
Percent Water (volume):	0	

-----SECTION 3 - HAZARDS IDENTIFICATION -----

NFPA: Health: 1 Fire: 0 Reactivity: 0 Other: N.D.
 HMIS: Health: 1 Fire: 0 Reactivity: 0 Special Protection: *
 Miscellaneous:
 APPEARANCE AND ODOR: CLOTH COATED WITH ABRASIVE PARTICLES WHICH ARE BONDED WITH RESIN BINDER.

EMERGENCY OVERVIEW

ROUTES OF ENTRY (DURING USE): INHALATION: AIRBORNE DUSTS OR FUMES. SKIN: AIRBORNE DUSTS OR FUMES. INGESTION: AIRBORNE DUSTS OR FUMES.

HMIS AND NFPA HAZARD RATINGS:

CATEGORY	HMIS	NFPA
ACUTE HEALTH	1	1
PERSONAL PROT./SPECIFIC HAZ.*		N.D.

*SEE SECTION 8.

POTENTIAL HEALTH EFFECTS

Target Organs:
 ROUTES OF ENTRY (DURING USE): INHALATION, SKIN, INGESTION
 Eye:
 (ACUTE AND CHRONIC): EYE IRRITATION.

SIGNS AND SYMPTOMS OF EXPOSURE: DEPOSITS OR MATERIAL IN EYES.
 Skin:
 (ACUTE AND CHRONIC): SKIN IRRITATION.

SIGNS AND SYMPTOMS OF EXPOSURE: DEPOSITS OR MATERIAL ON SKIN.
 Ingestion:
 Inhalation:
 (ACUTE AND CHRONIC): BREATHING DIFFICULTY, NASAL AND RESPIRATORY IRRITATION.

SIGNS AND SYMPTOMS OF EXPOSURE: DEPOSITS OR MATERIAL IN NASAL PASSAGES. COUGHING AND/OR BREATHING DIFFICULTIES.
 Miscellaneous:

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-----SECTION 4 - FIRST AID MEASURES -----

Eye:
IRRIGATE EYES WITH COPIOUS AMOUNTS OF WATER.
Skin:
IRRIGATE SKIN WITH COPIOUS AMOUNTS OF WATER.
Ingestion:
Inhalation:
REMOVE TO DUST FREE AREA.
Notes to Physician:

-----SECTION 5 - FIRE FIGHTING MEASURES -----

Unusual Fire and Explosion Hazards:
N.A.
Special Fire Fighting Procedures:
BACKINGS AND CURED RESIN WILL BURN OR DECOMPOSE. USE RESPIRATORY PROTECTION.
Extinguishing Media:
WATER, CARBON DIOXIDE, DRY CHEMICAL, FOAM.
Flash Point:
FLASHPOINT AND METHOD: N/A
Flammable Limits:
Lower Limit:
N/A
Upper Limit:
N/A
AutoIgnition Temperature:
N/A
General Information:
FLAMMABILITY LIMITS (%): N/A

-----SECTION 6 - ACCIDENTAL RELEASE MEASURES -----

Disposal:
IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS FOR LANDFILL.
Spills/Leaks:
ORDINARY PRECAUTIONS FOR DUST AND PARTICULATES.

-----SECTION 7 - HANDLING and STORAGE -----

Handling:
N.A.
Storage:
N.A.

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-----SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION -----

Engineering Controls:

VENTILATION:

LOCAL EXHAUST: MUST BE USED TO CONTROL EXPOSURE TO DUST OR FUMES.
MECHANICAL: HOODS CONNECTED TO EXHAUST DUCTS AND APPROPRIATE DUST COLLECTOR.

Eyes:

WEAR SAFETY GLASSES WHILE SANDING OR GRINDING. OSHA 29 CFR 1910.133.

Skin:

WEAR GLOVES TO PREVENT ABRASION AND/OR SKIN IRRITATION.

Clothing:

OTHER PROTECTIVE EQUIPMENT: HEARING PROTECTION OSHA 29 CFR 1910.95.

Respirators:

IF LIMITS ARE EXCEEDED DURING SANDING OR GRINDING, AN APPROVED NIOSH RESPIRATOR MUST BE USED; OSHA 29 CFR 1910.134.

-----SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES -----

Appearance/Odor:

CLOTH COATED WITH ABRASIVE PARTICLES WHICH ARE BONDED WITH RESIN BINDER.

pH: N.A.

Vapor Pressure: N.A.

Vapor Density: (AIR = 1): N.A.

Evaporation Rate: (BUAC = 1): N.A.

Viscosity: N.A.

Boiling Point: N.A.

Freezing/Melting Point: FREEZING POINT: N.A.

Decomposition Temperature: N.A.

Solubility: IN WATER: INSOLUBLE

Specific Gravity: 1

Molecular Formula: N.A.

Molecular Weight: N.A.

Miscellaneous:

SPECIFIC GRAVITY (WATER = 1): N.A.

% VOLATILE BY WT: N.A.

VOC (% BY WT.): 0

-----SECTION 10 - STABILITY AND REACTIVITY -----

Chemical Stability:

STABLE.

Conditions to Avoid:

STABILITY: NOT APPLICABLE.

POLYMERIZATION: N.A.

Incompatibilities with Other Materials:

IN USE ORGANIC FUMES MAY BE LIBERATED.

Hazardous Decomposition Products:

BINDINGS AND CURED RESIN WILL BURN OR DECOMPOSE.

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Hazardous Polymerization:
WILL NOT OCCUR.

-----SECTION 11 - TOXICOLOGICAL INFORMATION -----

Toxicological Information:
CARCINOGENICITY:
NTP: N.A IARC MONOGRAPHS: N.A. OSHA REGULATED: N.A.

-----SECTION 12 - ECOLOGICAL INFORMATION -----

Ecological Information:
NO DATA AVAILABLE.

-----SECTION 13 - OTHER PRECAUTIONS -----

Other Precautions:
NOT APPLICABLE.
Work/Hygienic Practices:
ORDINARY WASHING AND CLEANLINESS PRACTICES.

-----SECTION 14 - TRANSPORT INFORMATION -----

Transportation Information:
DOT SHIPPING NAME: NONE

HAZARD CLASS OR DIVISION: NONE

CARTON MARKINGS: NONE

IDENTIFICATION NUMBER: NONE

PACKING GROUP: NONE

LABELS: NONE
Label Information:

-----SECTION 15 - REGULATORY INFORMATION -----

Regulatory Information:
MATERIALS REGULATED BY OSHA 29 CFR 1910.1200, HAZARD COMMUNICATION
STANDARD AND/OR MASSACHUSETTS GENERAL LAW, CHAPTER III, RIGHT TO
KNOW REGULATIONS.

TSCA STATUS: EACH INGREDIENT IS EITHER LISTED ON, OR IS EXEMPT
FROM LISTING ON THE TSCA INVENTORY.

ORDER NO: 6234014 RELEASE NO: 001 MSDS NO: 000189

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NSR STATUS (CANADA): NOT DETERMINED.

SARA TITLE III:

NSR STATUS (CANADA): NOT DETERMINED.

SARA TITLE III:

HAZARD CATEGORIES:
ACUTE HEALTH: YES
CHRONIC HEALTH: NO
FIRE HAZARD: NO
PRESSURE HAZARD: NO

REPORTABLE INGREDIENTS:
SECTION 313: NO

CERCLA RQ: N.A.

-----SECTION 16 - ADDITIONAL INFORMATION -----

Additional Information:
N.A. - NOT APPLICABLE
N.D. - NOT DETERMINED
N.E. - NOT ESTABLISHED

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Synonyms: -842331-10 -842332-10 -842333-10 -842431-10 -842432-10 -842433-10 07451
07453 07455 07456 07457 07480 07481 07482 07483 07485 07486 276301 276302
276303 276401 276403 842331 842332 842333 842431 842432 842433 845614 845811
845812 845814

MATERIAL SAFETY DATA SHEET
SURFACE CONDITIONING HOOK AND LOOP DISCS

-----SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

MSDS Name: SURFACE CONDITIONING HOOK AND LOOP DISCS

Product CAS: (none)

Product Code:

Synonyms: -842331-10; -842332-10; -842333-10; -842431-10; -842432-10; -842433-10; 07451-07457; 0
07486; 276301; 276302; 276303; 276401; 276403; 842331; 842332; 842333; 842431; 842432; 842433; 8
845811; 845812; 845814; C21541-C21543; SURFACE CONDITIONING HOOK AND LOOP DISCS

Company Identification:

Name: 3M

Address: 3M Center

Address:

City: St. Paul State: MN Zip: 55144-1000

For information, call: HEALTH ISSUES AND TECHNICAL INFORMATION (8AM-5PM ET): 1-216-416-
7200 X 5860

Emergency Number: ROCKY MOUNTAIN POISON CONTROL CENTER (24 HOURS EVERYDAY): 1-303-
623-5716

Emergency Agency: CHEMTREC (24 HOURS EVERYDAY):

Number: 1-800-424-9300

MSDS Creation Date: 1/1/2005

Supersedes Date: 1/1/2003

-----SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS -----

Chemical Name	CAS	MIN	MAX
ALUMINUM OXIDE, NON-FIBROUS	1344-28-1	0	75
SILICON CARBIDE	409-21-2	0	75
NYLON FIBERS	(none)	5	30
CURED ADHESIVE RESIN	(none)	10	50

Miscellaneous:

HAZARDOUS INGREDIENTS

INGREDIENTS

ALUMINUM OXIDE, NON-FIBROUS* (CAS NUMBER: 1344-28-1**)

SILICON CARBIDE*

NYLON FIBERS (CAS NUMBER: NONE)

CURED ADHESIVE RESIN (CAS NUMBER: NONE)

*MATERIALS REGULATED BY OSHA 29 CFR 1910.1200 HAZARD COMMUNICATION
STANDARD.

**THE EPA HAS DESIGNATED THAT NON-FIBROUS FORMS OF ALUMINUM OXIDE ARE
NOT

BARNES DISTRIBUTION
A TOXIC CHEMICAL UNDER SECTION 313 OF SARA.

NOTE: THE MANUFACTURER REGARDS THESE PRODUCTS AS "ARTICLE" AS DEFINED IN THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200. THE USE OF APPROVED RESPIRATORS, VENTILATION EQUIPMENT, FACE AND HAND PROTECTION IS RECOMMENDED FOR THE SAFE USE OF THESE PRODUCTS.

DEFINITION OF "ARTICLE" PER 29 CFR 1910.1200 7/1/88 EDITION: "ARTICLE" MEANS MANUFACTURED ITEM: (I) WHICH IS FORMED TO A SPECIFIC SHAPE OR DESIGN DURING MANUFACTURE; (II) WHICH HAS END USE FUNCTION(S) DEPENDENT IN WHOLE OR PART UPON ITS SHAPE OR DESIGN DURING END USE; AND (III) WHICH DOES NOT RELEASE, OR OTHERWISE RESULT IN EXPOSURE TO A HAZARDOUS CHEMICAL UNDER NORMAL CONDITIONS OF USE.

NOTE: SEE BELOW FOR EXPOSURE LIMIT DATA FOR THESE INGREDIENTS

EXPOSURE CONTROLS

INGREDIENT	OSHA PEL	ACGIH TLV	OTHER LIMITS
ALUMINUM OXIDE, NON-FIBROUS	15 MG/M3	10 MG/M3	N.E.
SILICON CARBIDE	15 MG/M3	10 MG/M3	N.E.
NYLON FIBERS	15 MG/M3	10 MG/M3	N.E.
CURED ADHESIVE RESINS	15 MG/M3	10 MG/M3	N.E.

Lbs of VOC per Gallon Coating (minus water): 0
Coating Density (lbs/gal): 0
Solvent Density (lbs/gal): 0
Percent Solvent (volume): 0
Percent Solids (volume): 0
Percent Water (volume): 0

-----SECTION 3 - HAZARDS IDENTIFICATION -----

NFPA: Health: Fire: Reactivity: Other:
HMIS: Health: 1 Fire: 0 Reactivity: 0 Special Protection: 0
Miscellaneous:
APPEARANCE AND ODOR: DISC, ROLL OR WHEEL IMPREGNATED WITH AN ABRASIVE MATERIAL.

HMIS AND NFPA HAZARD RATINGS:

CATEGORY	HMIS	NFPA
ACUTE HEALTH	1	1
FLAMMABILITY	0	0
REACTIVITY	0	0
PERSONAL PROT./SPECIFIC HAZ.	*	N.D.

*SEE SECTION 8.

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POTENTIAL HEALTH EFFECTS

Target Organs:

PRIMARY ROUTES OF EXPOSURE: INHALATION, INGESTION, SKIN CONTACT, EYES.

Eye:

ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE: DUST MAY IRRITATE EYES. OTHER POTENTIAL HEALTH RISKS: DURING USE ON SOME MATERIALS,

ELEVATED SOUND LEVELS MAY BE CREATED WHICH AFFECT HEARING.

Skin:

ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE: CONTACT & ABSORPTION: NOT ABSORBED THROUGH SKIN. MAY CAUSE ABRASIONS.

Ingestion:

ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE: (DUST) NO KNOWN ADVERSE EFFECTS, BUT INGESTION NOT RECOMMENDED.

Inhalation:

ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE: (DURING USE): ACUTE - MAY CAUSE COUGHING (DUST), SHORTNESS OF BREATH.

CHRONIC: MAY AFFECT BREATHING CAPACITY.

Miscellaneous:

OTHER POTENTIAL HEALTH RISKS: OBTAIN MEDICAL ASSISTANCE.

-----SECTION 4 - FIRST AID MEASURES -----

Eye:

CONTACT: WASH WITH LARGE AMOUNTS OF WATER. OBTAIN MEDICAL ASSISTANCE IF NEEDED.

Skin:

CONTACT AND ABSORPTION: OBTAIN FIRST AID OR MEDICAL ASSISTANCE, IF NEEDED.

Ingestion:

OBTAIN FIRST AID OR MEDICAL ASSISTANCE, IF NEEDED.

Inhalation:

(DURING USE): REMOVE TO FRESH AIR. APPLY TO ARTIFICIAL RESPIRATION AS NEEDED. OBTAIN FIRST AID OR MEDICAL ASSISTANCE.

Notes to Physician:

-----SECTION 5 - FIRE FIGHTING MEASURES -----

Unusual Fire and Explosion Hazards:

EXPLOSION POTENTIAL: N.A.

Special Fire Fighting Procedures:

BACKINGS AND RESIN BINDER WILL BURN OR DECOMPOSE, USE RESPIRATORY PROTECTION.

FIRE FIGHTING PROCEDURES: BACKINGS AND CURED RESIN WILL BURN OR DECOMPOSE.

USE RESPIRATORY PROTECTION.

Extinguishing Media:

N.A.

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Flash Point:
AND METHOD: N.A.
Flammable Limits:
Lower Limit:
N.A.
Upper Limit:
N.A.
AutoIgnition Temperature:
N.A.
General Information:
FLAMMABILITY LIMITS (%): N.A.

-----SECTION 6 - ACCIDENTAL RELEASE MEASURES -----

Disposal:
STANDARD LANDFILL METHODS CONSISTENT WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS.
Spills/Leaks:
NORMAL CLEANUP PROCEDURES.

-----SECTION 7 - HANDLING and STORAGE -----

Handling:
HANDLE WITH ADEQUATE VENTILATION. SEE OSHA 29 CFR 1910.94 (VENTILATION) AND OSHA 29 CFR 1910.100 (AIR CONTAMINANTS).
Storage:
HANDLE WITH ADEQUATE VENTILATION. SEE OSHA 29 CFR 1910.94 (VENTILATION) AND OSHA 29 CFR 1910.100 (AIR CONTAMINANTS). OSHA 29 CFR 1910.213(P) (SANDING MACHINES).

-----SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION -----

Engineering Controls:
VENTILATION:
LOCAL: RECOMMENDED.
MECHANICAL: RECOMMENDED.
OTHER: NO APPLICABLE INFORMATION FOUND.
Eyes:
RECOMMENDED. OSHA 29 CFR 1910.133 (FACE AND EYE PROTECTION).
Skin:
PROTECTIVE GLOVES AS DESIRED BY USER.
Clothing:
OTHER PROTECTIVE EQUIPMENT: AS NEEDED, HEARING PROTECTION OSHA 29 CFR 1910.215 (HEARING PROTECTION).
Respirators:
AS NEEDED, APPROVED DUST RESPIRATOR OSHA 29 CFR 1910.134.

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-----SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES -----

Appearance/Odor:
DISC, ROLL OR WHEEL IMPREGNATED WITH AN ABRASIVE MATERIAL.
pH: N.A.
Vapor Pressure: N.A.
Vapor Density: (AIR = 1): N.A.
Evaporation Rate: (BUAC = 1): N.A.
Viscosity: N.A.
Boiling Point: N.A.
Freezing/Melting Point: FREEZING POINT: N.A.
Decomposition Temperature: N.A.
Solubility: IN WATER: INSOLUBLE
Specific Gravity: 1
Molecular Formula: N.A.
Molecular Weight: N.A.
Miscellaneous:
SPECIFIC GRAVITY (WATER = 1): N.A.
% VOLATILE BY WT: N.A.
VOC (% BY WT.): N.A.

-----SECTION 10 - STABILITY AND REACTIVITY -----

Chemical Stability:
STABLE.
Conditions to Avoid:
STABILITY: NOT APPLICABLE.

POLYMERIZATION: N.A.
Incompatibilities with Other Materials:
NOT APPLICABLE.
Hazardous Decomposition Products:
IN USE DUST AND DECOMPOSING RESIN SYSTEM FUMES ARE GENERATED. IN MOST
CASES, THE MATERIAL REMOVED FROM THE WORK PIECE WILL BE SIGNIFICANTLY
GREATER THAN THE COATED ABRASIVE PRODUCT COMPONENTS.
Hazardous Polymerization:
WILL NOT OCCUR.

-----SECTION 11 - TOXICOLOGICAL INFORMATION -----

Toxicological Information:
CARCINOGENICITY:
NTP:NA
IARC MONOGRAPHS: N.A.
OSHA REGULATED: N.A.

-----SECTION 12 - ECOLOGICAL INFORMATION -----

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Ecological Information:
NO DATA AVAILABLE.

-----SECTION 13 - OTHER PRECAUTIONS -----

Other Precautions:
Work/Hygienic Practices:

-----SECTION 14 - TRANSPORT INFORMATION -----

Transportation Information:
DOT SHIPPING NAME: NONE

HAZARD CLASS OR DIVISION: NONE

CARTON MARKINGS: NONE

IDENTIFICATION NUMBER: NONE

PACKING GROUP: NONE

LABELS: NONE
Label Information:

-----SECTION 15 - REGULATORY INFORMATION -----

Regulatory Information:
SEE SECTION 2.

TSCA STATUS: EACH INGREDIENT IS EITHER LISTED ON, OR IS
EXEMPT FROM LISTING ON THE TSCA INVENTORY.

NSR STATUS (CANADA): NOT DETERMINED.

SARA TITLE III:

HAZARD CATEGORIES:
ACUTE HEALTH: YES
CHRONIC HEALTH: NO
FIRE HAZARD: NO
PRESSURE HAZARD: NO

REPORTABLE INGREDIENTS:
SECTION 313: NO

CERCLA RQ: N.A.

ORDER NO: 0466333 RELEASE NO: 001 MSDS NO: 002608

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-----SECTION 16 - ADDITIONAL INFORMATION -----

Additional Information:

N.A. - NOT APPLICABLE
ESTABLISHED

N.D. - NOT DETERMINED

N.E. - NOT

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Synonyms: -21463-1 -21463-2 -21463-3 21463
MATERIAL SAFETY DATA SHEET
TEFLON SEALANT TAPE

-----SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

MSDS Name: **TEFLON SEALANT TAPE**
Product CAS: (none)
Product Code:
Synonyms: -21463-1; -21463-2; -21463-3; -21463-X; 21463; 21464; TEFLON SEALANT TAPE
Company Identification:
Name: SPECIALTY TAPE & LABEL CO
Address: 6511 EASTLAND ROAD
Address:
City: CLEVELAND State: OH Zip: 44142
For information, call: 216-416-7200
Emergency Number: 24 HR: 303-623-5716
Emergency Agency:
Number:
MSDS Creation Date: 12/10/2010
Supersedes Date: 1/1/2008
Miscellaneous:
CHEMICAL FAMILY: N.A.

-----SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS -----

Chemical Name	CAS	MIN	MAX
POLYTETRAFLUOROETHYLENE (PTFE)	9002-84-0	100	100

% W	CHEMICAL NAME(S)	OSHA PEL	ACGIH TLV	OTHER LIMITS	LISTED AS CARCINOGEN
					NTP, IARC OR OSHA 1910(Z)(SPECIFY)
100	POLYTETRAFLUORO-ETHYLENE (PTFE)	N.A.	N.A.	N.A.	NO

PTFE TAPE, AS SUCH, IS NOT A HAZARDOUS MATERIAL. IT IS A PROCESSED SOLID POLYMER TEMPERATURE RANGE -450 TO +500 F.

* ALL CHEMICAL COMPOUNDS MARKED WITH AN ASTERISK (*) ARE TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

Lbs of VOC per Gallon Coating (minus water): 0
Coating Density (lbs/gal): 0
Solvent Density (lbs/gal): 0
Percent Solvent (volume): 0
Percent Solids (volume): 0

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Percent Water (volume): 0

-----SECTION 3 - HAZARDS IDENTIFICATION -----

NFPA: Health: 0 Fire: 0 Reactivity: 0 Other:
HMIS: Health: 0 Fire: 0 Reactivity: 0 Special Protection:
POTENTIAL HEALTH EFFECTS
Target Organs:
PRIMARY ROUTES OF ENTRY:
INHALATION: NO TOXIC EFFECTS FROM DUSTS.
EYES: MECHANICAL IRRITATION.
SKIN: PROBABLY NON-IRRITATING AND NON-ABSORBING.
INGESTION: PTFE HAS BEEN SHOWN TO BE INERT WHEN INGESTED IN RATS.
Eye:
N/A
Skin:
N/A
Ingestion:
Inhalation:
HEALTH HAZARDS (ACUTE AND CHRONIC - INCLUDE TARGET ORGAN EFFECTS):
INHALATION OF DECOMPOSITION PRODUCTS; OTHERWISE NONE.

ACUTE: FLU LIKE TRANSIENT SICKNESS.

CHRONIC: COULD BE FATAL.

SIGNS AND SYMPTOMS OF EXPOSURE: FLU LIKE FEVER.

Miscellaneous:

CONDITIONS TO AVOID: NONE.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: RESPIRATORY INFLAMMATION.

-----SECTION 4 - FIRST AID MEASURES -----

Eye:
N/A
Skin:
N/A
Ingestion:
N/A
Inhalation:
MOVE TO FRESH AIR. REFER TO PHYSICIAN.
Notes to Physician:

-----SECTION 5 - FIRE FIGHTING MEASURES -----

Unusual Fire and Explosion Hazards:
PRODUCT WILL EMIT TOXIC FUMES AT HIGH TEMPERATURES ABOVE 800 F
TETRAFLUOROPROPYLENE; ABOVE 825 F HEXAFLUOROPROPYLENE; ABOVE 885 F;
PERFLUOROISOBUTYLENE; ABOVE 930 F CARBONYL FLUORIDE.

B A R N E S D I S T R I B U T I O N

Special Fire Fighting Procedures:
SELF CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE AND PROTECTIVE CLOTHING IF INVOLVED WITH OTHER MATERIALS.

Extinguishing Media:
N.A. - USE MEDIA SUITABLE FOR SURROUNDING FIRE.

Flash Point:
N.A.

Flammable Limits:
Lower Limit:

LEL: N.A.

Upper Limit:

UEL: N.A.

AutoIgnition Temperature:
N.A.

General Information:

-----SECTION 6 - ACCIDENTAL RELEASE MEASURES -----

Disposal:
CONFORMING TO ALL APPLICABLE REGULATIONS.

RCRA HAZARDOUS WASTE NO. (40 CFR 261.33): N.A.

Spills/Leaks:
SWEEP UP TO PREVENT SPILLAGE ON TAPE.

-----SECTION 7 - HANDLING and STORAGE -----

Handling:
NO UNUSUAL PRECAUTIONS.

Storage:
NO UNUSUAL PRECAUTIONS.

-----SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION -----

Engineering Controls:
VENTILATION -
LOCAL EXHAUST (SPECIFY RATE): N.A.
MECHANICAL (GENERAL)(SPECIFY RATE): N.A.
SPECIAL: N.A.
OTHER: N.A.

Eyes:
(SPECIFY TYPE): N.A.

Skin:
PROTECTIVE GLOVES (SPECIFY TYPE): N.A.

Clothing:
OTHER PROTECTIVE EQUIPMENT: N.A.

Respirators:
(SPECIFY TYPE): N.A., EXCEPT AS IN SECTION 5.

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-----SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES -----

Appearance/Odor:

WHITE SOLID

pH: N.A.

Vapor Pressure: N.A.

Vapor Density: (AIR=1): N.A.

Evaporation Rate: (ETHER=1): N.A.

Viscosity: N.A

Boiling Point: N.A.

Freezing/Melting Point: MELTING POINT: 341 C (642 F)

Decomposition Temperature: N.A

Solubility: IN WATER: INSOLUBLE

Specific Gravity: 2.2

Molecular Formula: PROPRIETARY

Molecular Weight: N.A

Miscellaneous:

REACTIVITY IN WATER: NONE

SPECIFIC GRAVITY (H2O=1): 2.1-2.2

PERCENT VOLATILE BY VOLUME (%): N.A.

MAXIMUM PERCENT VOC BY WEIGHT (%): %N.A. METHOD USED: CALCULATED.

PERCENT SOLID BY WEIGHT (%): 100%

VOLATILE ORGANIC COMPOUND (VOC)(AS PACKAGED, MINUS WATER): N.A.

-----SECTION 10 - STABILITY AND REACTIVITY -----

Chemical Stability:

STABLE

Conditions to Avoid:

STABILITY: HEATING ABOVE 750 F FOR PROLONGED PERIODS.

Incompatibilities with Other Materials:

MOLTEN ALKALI METALS: INTERHALOGEN COMPOUNDS.

Hazardous Decomposition Products:

SEE SECTION 5. TOXIC FUMES AT HIGH TEMPERATURES.

Hazardous Polymerization:

WILL NOT OCCUR

-----SECTION 11 - TOXICOLOGICAL INFORMATION -----

Toxicological Information:

CHEMICAL LISTED AS CARCINOGEN:

NATIONAL TOXICOLOGY PROGRAM: NO

I.A.R.C. MONOGRAPHS: NO

ORDER NO: 2861497 RELEASE NO: 001 MSDS NO: 002802

BARNES DISTRIBUTION

OSHA: NO

-----SECTION 12 - ECOLOGICAL INFORMATION -----

Ecological Information:

-----SECTION 13 - OTHER PRECAUTIONS -----

Other Precautions:

NONE.

Work/Hygienic Practices:

NO SMOKING WHILE HANDLING MATERIAL.

-----SECTION 14 - TRANSPORT INFORMATION -----

Transportation Information:

HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS,
HAZARD

ID NO.(49 CFR 172.101): NONE.

ADDITIONAL HAZARD CLASSES (AS APPLICABLE): NONE.

Label Information:

-----SECTION 15 - REGULATORY INFORMATION -----

Regulatory Information:

CERCLA (SUPERFUND) REPORTABLE QUANTITY (IN LBS): N.A.

-----SECTION 16 - ADDITIONAL INFORMATION -----

Additional Information:

TEFLON(R) IS A REGISTERED TRADEMARK OF THE DUPONT CORPORATION.

N.A. - NOT APPLICABLE

N.E. - NOT ESTABLISHED

N.D. - NOT DETERMINED

BARNES DISTRIBUTION

Synonyms: KP82743
MATERIAL SAFETY DATA SHEET
LIQUID ELECTRIC TAPE (BLACK)

-----SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

MSDS Name: LIQUID ELECTRIC TAPE (BLACK)
Product CAS: (none)
Product Code:
Synonyms: KP82743; LIQUID ELECTRIC TAPE (BLACK)
Company Identification:
Name: MARINE DEVELOPMENT
Address: 515 EAST 41st STREET
City: PATERSON State: NJ Zip: 07504

For information, call: 973-754-7087
Emergency Number: 800-535-5053
Date Prepared: 04/30/2010

-----SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS -----

Chemical Name	CAS	
NON-IONIC SURFACTANT	(none)	9-10%
ETHYLENE GLYCOL	107-21-1	8-10%
PROPYLENE GLYCOL N-BUTYL ETHER	5131-66-8/15821-83-7	8-10%
DIPRAPYLENE GLYCOL BUTYL ETHER	29911-28-2	3-8%
RESIN	75-01-4	15-20%
RESIN (COLLODIAL EMULSION) CONTAINS ACRYLIC VINYL WITH (VINYL CHLORIDE) LESS THAN .001%		
BLACK PIGMENT	(none)	3-5%

THIS PRODUCT IS NOT KNOWN TO CONTAIN A SUBSTANCE SUBJECT TO SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) AND 40CFR372 AT OR ABOVE DE MINIMUS AMOUNTS.

-----SECTION 3 - HAZARDS IDENTIFICATION -----

HMIS: Health: 0 Fire: 0 Reactivity: 0 Special Protection:

POTENTIAL HEALTH EFFECTS: MAY CAUSE IRRITATION. PROLONGED OR REPEATED CONTACT MAY CAUSE MORE IRRITATION. SKIN CONTACT CAUSES DEFATTING AND DRYING OF SKIN. MAY CAUSE HEADACHES, DIZZINESS.

Eye: MAY CAUSE IRRITATION

Skin: MAY CAUSE IRRITATION

Ingestion: MAY BE TOXIC BY INGESTION.

-----SECTION 4 - FIRST AID MEASURES -----

Eye: WASH WITH PLENTY OF WATER. SEE PHYSICIAN.
Skin: WASH WITH SOAP AND WATER

BARNES DISTRIBUTION

Ingestion: DILUTE BY DRINKING LOTS OF WATER SEE PHYSICIAN IMMEDIATELY.

-----SECTION 5 - FIRE FIGHTING MEASURES -----

Unusual Fire and Explosion Hazards: N/A
Special Fire Fighting Procedures: TREAT AS LATEX PAINT
Extinguishing Media: DRY CHEMICAL FOAM: CO2
Flash Point: N/A
Flammable Limits:
Lower Limit:
N/A
Upper Limit:
N/A
AutoIgnition Temperature:
N/A

-----SECTION 6 - ACCIDENTAL RELEASE MEASURES -----

Disposal: DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS
Spills/Leaks: HANDLE AS A LATEX MATERIAL COATING. SPILLED LATEX IS VERY SLIPPERY SO STOP LEAK/SPILL AND REMOVE AS MUCH AS POSSIBLE BY ABSORBING WITH INERT MATERIAL SUCH AS SAND. PLACE WASTE IN A CLOSED AND LABELED CONTAINER FOR DISPOSAL.

-----SECTION 7 - HANDLING and STORAGE -----

Handling: HANDLE AS A LATEX MATERIAL COATING. SPILLED LATEX IS VERY SLIPPERY. STORE AT ROOM TEMPERATURE. AVOID FREEZING. WASH EXPOSED SKIN WITH SOAP AND WATER AFTER HANDLING.

-----SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION -----

Engineering Controls: LOCAL EXHAUST
Eyes: CHEMICAL GOGGLES/FACE SHIELD FOR ANY SPLASHES.
Skin: RUBBER OR PLASTIC GLOVES. LONG SLEEVE SHIRT AND LONG PANTS.

-----SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES -----

Appearance/Odor:
BLACK WITH LATEX ODOR
pH: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Evaporation Rate: SAME AS WATER
Viscosity: N/A
Boiling Point: 245 DEG F
Freezing/Melting Point: N/A
Solubility in water: COMPLETE WATER DILUTABLE
Specific Gravity: 1.04
VOC: 46 g/L (172 g/gal)

B A R N E S D I S T R I B U T I O N

-----SECTION 10 - STABILITY AND REACTIVITY -----

Chemical Stability: STABLE

Conditions to Avoid: FREEZING: REACTS WITH OXIDING AGENTS

Incompatibilities with Other Materials:

HYDROGEN PEROXIDE, PERMANGANATES/PERCHLORATES DEPENDING ON AMOUNT: CONTACT
CAN RESULT IN INTENSE HEAT, EXPLOSION

Hazardous Decomposition Products: TOXIC GAS GENERATION (CO2 CO2)

Hazardous Polymerization: WILL NOT OCCUR.

-----SECTION 11 - TOXICOLOGICAL INFORMATION -----

NO DATA

-----SECTION 12 - ECOLOGICAL INFORMATION -----

NO DATA

-----SECTION 13 - OTHER PRECAUTIONS -----

NO DATA

-----SECTION 14 - TRANSPORT INFORMATION -----

DOT SHIPPING INFO: PAINT: WATERBASE NON-FLAMMABLE, NON-HAZARDOUS

RATE CLASS 55

-----SECTION 15 - REGULATORY INFORMATION -----

NO DATA

-----SECTION 16 - ADDITIONAL INFORMATION -----

NO DATA

ORDER NO: 4026439 RELEASE NO: 001 MSDS NO: 004536

BARNES DISTRIBUTION

Synonyms: BD3000 BD3001 BD3002 BD3003 BD3004 BD3005 BD3006 BD3007 BD3008 BD3009 BD3010
BD3011 BD3012 BD3013 BD3014 BD3015 BD3016 BD3017 BD3018 BD3019 BD3020 BD3021
BD3022 BD3023 BD3024 BD3025 BD3026 BD3027 BD3028 BD3029 BD3030 BD3031 BD3032
BD3033 BD3034 BD3035 BD3036 BD3037 BD3038 BD3039 BD3040 BD3041 BD3042 BD3043
BD3044 BD3045 BD3046 BD3047 BD3048 BD3049 BD3050 BD3051 BD3052 BD3053 BD3054
BD3055 BD3056 BD3057 BD3058 BD3059 BD3060 BD3061 BD3062 BD3063 BD3064 BD3065
BD3066 BD3067 BD3068 BD3069

MATERIAL SAFETY DATA SHEET
ALUMINUM OXIDE AND SILICON CARBIDE GRINDING & CUTTING WHEELS

-----SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

MSDS Name: ALUMINUM OXIDE AND SILICON CARBIDE GRINDING & CUTTING WHEELS

Product CAS: (none)

Product Code:

Synonyms: 3010; ALUMINUM OXIDE AND SILICON CARBIDE GRINDING & CUTTING WHEELS;
BD3000; BD3001; BD3002; BD3003; BD3004; BD3005; BD3006; BD3007; BD3008; BD3009;
BD3010; BD3011;
BD3012; BD3013; BD3014; BD3015; BD3016; BD3017; BD3018; BD3019; BD3020; BD3021;
BD3022; BD3023;
BD3024; BD3025; BD3026; BD3027; BD3028; BD3029; BD3030; BD3031; BD3032; BD3033;
BD3034; BD3035;
BD3036; BD3037; BD3038; BD3039; BD3040; BD3041; BD3042; BD3043; BD3044; BD3045;
BD3046; BD3047;
BD3048; BD3049; BD3050; BD3051; BD3052; BD3053; BD3054; BD3055; BD3056; BD3057;
BD3058; BD3059;
BD3060; BD3061; BD3062; BD3063; BD3064; BD3065; BD3066; BD3067; BD3068; BD3069

Company Identification:

Name: TAIWAN RESIBON ABRASIVE PRODUCTS CO.

Address: 38 LANE 224, YENPING N. ROAD

Address: SEC 5

City: TAIPEI 111, TAIWAN, R.O.C. State: Zip:

For information, call: 886-2-28129316

Emergency Number: 1-866-438-6767

Emergency Agency:

Number:

MSDS Creation Date: 6/16/2011

Supersedes Date: 6/22/2005; 5/59/2008

-----SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS -----

Chemical Name	CAS	MIN	MAX
ALUMINUM OXIDE	1344-28-1	0	0
SILICON CARBIDE	409-21-2	0	0
SODIUM ALUMINUM	15096-52-3	0	0
CARBON	1333-86-4	0	0
PHENIL-FORMALDEHYDE	9003-35-4	0	0
AMORPHOUS SILICA	65997-17-3	0	0
Miscellaneous:			
NO CARCINOGEN			

BARNES DISTRIBUTION

Lbs of VOC per Gallon Coating (minus water): 0
Coating Density (lbs/gal): 0
Solvent Density (lbs/gal): 0
Percent Solvent (volume): 0
Percent Solids (volume): 0
Percent Water (volume): 0

-----SECTION 3 - HAZARDS IDENTIFICATION -----

NFPA: Health: Fire: Reactivity: Other:
HMIS: Health: Fire: Reactivity: Special Protection:
POTENTIAL HEALTH EFFECTS
Target Organs:
Eye:
MINUTE DUST MAY GET EYES SCARRED
Skin:
NOT APPLICABLE
Ingestion:
MAY EFFECT THE LUNGS
Inhalation:
SUCH DUST MAY EFFECT THE LUNGS
Miscellaneous:
MINUTE DUST PRODUCED DURING THE GRINDING PROCESS.

-----SECTION 4 - FIRST AID MEASURES -----

Eye:
WASH AND SEE A DOCTOR
Skin:
WASH AND SEE A DOCTOR
Ingestion:
N/A
Inhalation:
N/A
Notes to Physician:

-----SECTION 5 - FIRE FIGHTING MEASURES -----

Unusual Fire and Explosion Hazards:
N/A
Special Fire Fighting Procedures:
N/A
Extinguishing Media:
N/A
Flash Point:
N/A
Flammable Limits:
Lower Limit:
N/A
Upper Limit:

BARNES DISTRIBUTION

N/A
AutoIgnition Temperature:
N/A
General Information:

-----SECTION 6 - ACCIDENTAL RELEASE MEASURES -----

Disposal:
NOT APPLICABLE
Spills/Leaks:
NOT APPLICABLE

-----SECTION 7 - HANDLING and STORAGE -----

Handling:
DO NOT DROP, TUMBLE OR HIT THME AGAINST OTHER OBJECTS.
Storage:
STORE IN A DRY PLACE.

-----SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION -----

Engineering Controls:
LOCAL EXHAUSTER AND DUST COLLECTOR SHOULD BE PROVIDED.
Eyes:
WEAR GOGGLES TO PROTECT EYES FROM ENTRY OF MINUTE DUST.
Skin:
WEAR GLOVES TO PROTECT HANDS.
Clothing:
Respirators:
WEAR A MASK TO PREVENT DUST FROM BEING INHALED.

-----SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES -----

Appearance/Odor:
N/A
pH: N/A
Vapor Pressure: N/A
Vapor Density: N/A
Evaporation Rate: N/A
Viscosity: N/A
Boiling Point: N/A
Freezing/Melting Point: N/A
Decomposition Temperature: N/A
Solubility: N/A
Specific Gravity: 0
Molecular Formula: N/A
Molecular Weight: N/A
Miscellaneous:

BARNES DISTRIBUTION

-----SECTION 10 - STABILITY AND REACTIVITY -----

Chemical Stability:

N/A

Conditions to Avoid:

N/A

Incompatibilities with Other Materials:

N/A

Hazardous Decomposition Products:

N/A

Hazardous Polymerization:

N/A

-----SECTION 11 - TOXICOLOGICAL INFORMATION -----

Toxicological Information:

NO DATA

-----SECTION 12 - ECOLOGICAL INFORMATION -----

Ecological Information:

NO DATA

-----SECTION 13 - OTHER PRECAUTIONS -----

Other Precautions:

NO DATA

Work/Hygienic Practices:

NO DATA

-----SECTION 14 - TRANSPORT INFORMATION -----

Transportation Information:

NO DATA

Label Information:

NO DATA

-----SECTION 15 - REGULATORY INFORMATION -----

Regulatory Information:

NO DATA

-----SECTION 16 - ADDITIONAL INFORMATION -----

Additional Information:

ORDER NO: 1724772 RELEASE NO: 001 MSDS NO: 004722

BARNES DISTRIBUTION

Synonyms: KP80321 KP80322
MATERIAL SAFETY DATA SHEET

THIS MSDS COMPLIES WITH OSHA'S HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200 AND OSHA FORM 174

IDENTITY AND MANUFACTURER'S INFORMATION:

NFPA RATING:

HEALTH 2
FLAMMABILITY 0
REACTIVITY 0
SPECIAL

HMIS RATING:

HEALTH 2
FLAMMABILITY 0
REACTIVITY 0
PERSONAL PROTECTION B

MANUFACTURER'S NAME: AMREP, INC.

ADDRESS:

990 INDUSTRIAL PARK DRIVE
MARIETTA, GA 30062

INFORMATION CALLS: (770) 422-2071

EMERGENCY RESPONSE NUMBER: 1(800) 255-3924

DOT HAZARD CLASSIFICATION: NON-REGULATED

IDENTITY (TRADE NAME AS USED ON LABEL): MISTY RUST GUARD

DATE PREPARED: 12/10/08

PREPARED BY: IB

MSDS NUMBER: B00307

REVISION: 8

NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA

-----SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION -----

COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (HAZARDOUS COMPONENTS 1% OR GREATER; CARCINOGENS 0.1% OR GREATER)	CAS NUMBER	SARA III LIST	OSHA PEL (PPM)	ACGIH TLV (PPM)	CARCINOGEN REF. SOURCE **
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ORDER NO: 1724772 RELEASE NO: 001 MSDS NO: 004722

B A R N E S D I S T R I B U T I O N

ETHYLENE GLYCOL	107-21-1	YES	50	100	D
TANNIC ACID	1401-55-4	NO	N/E	N/E	D

-----SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS -----

BOILING POINT: 100 DEG. C

SPECIFIC GRAVITY (H2O=1): 1.01

VAPOR PRESSURE PSIG @ 70 DEG. F (AEROSOLS): N/A

VAPOR PRESSURE (NON-AEROSOLS) (MMHg AND TEMPERATURE): N/D

VAPOR DENSITY (AIR = 1): N/D

EVAPORATION RATE (WATER = 1): 1

SOLUBILITY IN WATER: DISPERSIBLE

WATER REACTIVE: NO

APPEARANCE AND ODOR:

OFF-WHITE, OPAQUE, SLIGHTLY VISCOUS LIQUID WITH BLAND ODOR.

-----SECTION 3 - FIRE AND EXPLOSION HAZARD DATA -----

FLAMMABILITY AS PER USA FLAME PROJECTION TEST (AEROSOLS): N/A

AUTO IGNITION TEMPERATURE: N/A

FLAMMABILITY LIMITS IN AIR BY % IN VOLUME:

% LEL: N/A

% UEL: N/A

FLASH POINT AND METHOD USED (NON-AEROSOLS):

NONE-COMBUSTIBLE, WATER BASED PRODUCT.

EXTINGUISHER MEDIA:

NON-COMBUSTIBLE. USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.

SPECIAL FIRE FIGHTING PROCEDURES:

WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILDUP, SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE-PIECE & PROTECTIVE CLOTHING SHOULD BE USED IF INVOLVED IN A FIRE WITH OTHER MATERIALS.

UNUSUAL FIRE & EXPLOSION HAZARDS:

THIS MATERIAL WILL NOT SUPPORT COMBUSTION UNLESS THE WATER HAS EVAPORATED.

BARNES DISTRIBUTION

-----SECTION 4 - REACTIVITY HAZARD DATA -----

STABILITY:

- STABLE
- UNSTABLE

HAZARDOUS POLYMERIZATION:

- WILL
- WILL NOT OCCUR

INCOMPATIBILITY (MAT. TO AVOID):

MATERIALS REACTIVE TO WATER OR ACIDS, STRONG BASES, STRONG ACIDS, STRONG OXIDIZERS.

CONDITIONS TO AVOID: NONE KNOWN.

HAZARDOUS DECOMPOSITION PRODUCTS:

OXIDES OF CARBON AND UNIDENTIFIED ORGANIC COMPOUNDS.

-----SECTION 5 - HEALTH HAZARD DATA -----

PRIMARY ROUTES OF ENTRY:

- INHALATION
- INGESTION
- SKIN ABSORPTION
- EYE
- NOT HAZARDOUS

ACUTE EFFECTS:

INHALATION: SPRAY OR MIST CAN IRRITATE RESPIRATORY PASSAGES.

EYE CONTACT: IRRITATING.

SKIN CONTACT:

SHORT CONTACT WILL PROBABLY NOT CAUSE IRRITATION, BUT PROLONGED OR REPEATED CONTACT MAY.

INGESTION:

SMALL AMOUNTS MAY RESULT IN GASTROINTESTINAL DISTURBANCE, NAUSEA, VOMITING. DELAYED EFFECTS OF ETHYLENE GLYCOL TOXIC METABOLITES CAN RESULT IN DELAYED DAMAGE:

IRREVERSIBLE KIDNEY DAMAGE AND RENAL FAILURE. INGESTION OF ONE PINT OR MORE MAY BE TOXIC.

CHRONIC EFFECTS:

INGESTION OF SMALL AMOUNTS CAN RESULT IN CUMULATIVE INTERNAL TISSUE AND KIDNEY DAMAGE. MAY RESULT IN CENTRAL NERVOUS SYSTEM EFFECTS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

PRE-EXISTING DERMITITIS OR PRE-EXISTING RESPIRATORY CONDITIONS.

ORDER NO: 1724772 RELEASE NO: 001 MSDS NO: 004722

BARNES DISTRIBUTION

EMERGENCY FIRST AID PROCEDURES:

EYE CONTACT:
FLUSH WITH WATER FOR 15 MINUTES. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.

SKIN CONTACT:
WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.

INHALATION: REMOVE TO FRESH AIR.

INGESTION:
IMMEDIATELY CONTACT A POISON CONTROL CENTER, EMERGENCY TREATMENT CENTER OR PHYSICIAN. DO NOT INDUCE VOMITING. IF VICTIM IS CONSCIOUS, GIVE LARGE QUANTITY OF WATER OR MILK. MEDICAL TREATMENT IS MANDATORY.

NOTE:
INGESTION OF ONE GALLON OF THIS PRODUCT WILL PROVIDE 100 MLS OF ETHYLENE GLYCOL WHICH CONSIDERED THE LETHAL DOSE FOR AN AVERAGE ADULT.

-----SECTION 6 - CONTROL AND PROTECTIVE MEASURES -----

RESPIRATORY PROTECTION (SPECIFY TYPE):
NONE REQUIRED UNDER NORMAL CONDITIONS OF PRODUCT STORAGE AND USE.

PROTECTIVE GLOVES: PLASTIC OR RUBBER, IF DESIRED.

EYE PROTECTION: SAFETY GLASSES OR CHEMICAL GOGGLES.

VENTILATION REQUIREMENTS:
NO SPECIAL VENTILATION IS REQUIRED UNDER NORMAL CONDITIONS OF STORAGE AND USE.

OTHER PROTECTIVE CLOTHING & EQUIPMENT:
CLOTHING AS REQUIRED TO MINIMIZE SKIN CONTACT. EYEWASH STATION AND SAFETY SHOWER.

HYGIENIC WORK PRACTICES:
DO NOT EAT, DRINK OR SMOKE IN WORK AREA. WASH HANDS AFTER HANDLING.

-----SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE -----

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED:
WEAR SKIN & EYE PROTECTION DURING CLEANUP. SOAK UP LIQUID WITH ABSORBENT & SHOVEL INTO WASTE CONTAINER. COVER & LABEL CONTAINER & REMOVE FROM WORK AREA. WASH RESIDUE FROM SPILL AREA WITH WATER & FLUSH TO SEWER SERVICED BY A WASTE WATER TREATMENT FACILITY.

WASTE DISPOSAL METHODS:
DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS, pH IS LESS THAN 3, DISCARDED MATERIAL IS A HAZARDOUS WASTE.

ORDER NO: 1724772 RELEASE NO: 001 MSDS NO: 004722

B A R N E S D I S T R I B U T I O N

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE:

STORE IN ORIGINAL SHIPPING CONTAINERS. KEEP CLOSED WHEN NOT IN USE.
PROTECT FROM EXTREME HEAT AND COLD. PRODUCT MAY SEPARATE ON STANDING-SHAKE
OR STIR BEFORE USING. DO NOT GET INTO THE EYES.

OTHER PRECAUTIONS &/OR SPECIAL HAZARDS:

KEEP OUT OF REACH OF CHILDREN. READ & FOLLOW LABEL DIRECTIONS.
DO NOT TAKE INTERNALLY. DO NOT GET IN EYES.

WE BELIEVE THE STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS
CONTAINED HEREIN ARE RELIABLE, BUT THEY ARE GIVEN WITHOUT WARRANTY OR
GUARANTEE OF ANY KIND.

** CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN.

- (A) NTP
- (B) IARC MONOGRAPH
- (C) OSHA
- (D) NOT LISTED
- (E) ANIMAL DATA ONLY

BARNES DISTRIBUTION

Synonyms: 80050
KEX TIRE REPAIR

MATERIAL SAFETY DATA SHEET

PRODUCT NO.: KX-490F

4/01/2011

-----1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION -----

PRODUCT NAME: **BUFFING SOLUTION**

MANUFACTURER:
KEX TIRE REPAIR.
10250 INDUSTRIAL BLVD.
COVINGTON, GA 30014

24-HOUR EMERGENCY PHONE NUMBER: 800-424-9300 (CHEMTREC)

-----2. PRODUCT INGREDIENTS -----

CHEMICAL NAME	CAS NUMBER	% RANGE	OSHA PEL
HEPTANE (n-)	142-82-5	80-85	500 PPM TWA 2000 MG/M3 TWA
ACETONE	67-64-1	15-20	1000 PPM TWA 2400 MG/M3 TWA

COMPONENT RELATED REGULATORY INFORMATION:

THIS PRODUCT MAY BE REGULATED, HAVE EXPOSURE LIMITS OR OTHER INFORMATION IDENTIFIED AS THE FOLLOWING: RUBBER SOLVENT (NAPHTHA), KETONES, LIQUID, N.O.S.

THIS PRODUCT IS CONSIDERED HAZARDOUS UNDER 29 CFR 1910.1200 (HAZARD COMMUNICATION). THE BALANCE OF INGREDIENTS NOT RATED AS HAZARDOUS AS DEFINED IN 29 CFR 1910.1200. THIS PRODUCT IS REGULATED UNDER THE CANADIAN CONTROLLED PRODUCTS REGULATIONS.

REMAINDER OF COMPONENTS ARE EITHER NON-HAZARDOUS OR BELOW REGULATORY REQUIREMENTS.

-----3. HAZARDS IDENTIFICATION -----

POTENTIAL HEALTH EFFECTS:

THE PRODUCT IS A MILKY, OPAQUE LIQUID WITH A LIGHT HYDROCARBON ODOR. EXTREMELY FLAMMABLE LIQUID. THIS PRODUCT IS HARMFUL BY INHALATION, WHEN IN CONTACT WITH THE SKIN, EYES AND IF IT IS SWALLOWED. KEEP THIS PRODUCT AWAY FROM HEAT, SPARKS, OR OPEN FLAME.

BARNES DISTRIBUTION

EYE:

THIS PRODUCT MAY CAUSE IRRITATION TO THE EYES. VAPORS MAY ALSO PRODUCE EYE IRRITATION. CONTACT MAY CAUSE STINGING, WATERING, AND REDNESS.

SKIN:

THIS PRODUCT MAY CAUSE IRRITATION TO THE SKIN. CONTACT MAY CAUSE REDNESS, ITCHING, BURNING, AND SKIN DAMAGE. PROLONGED OR REPEATED CONTACT WITH THIS PRODUCT MAY DRY AND/OR DEFEAT THE SKIN. A SINGLE EXPOSURE IS NOT LIKELY TO RESULT IN THE PRODUCT BEING ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS.

INGESTION:

DIGESTION CAN CAUSE VOMITING. IF ASPIRATED (LIQUID ENTERS THE LUNG), THE PRODUCT MAY BE RAPIDLY ABSORBED THROUGH THE LUNGS AND CAN RESULT IN CHEMICAL PNEUMONITIS. (DO NOT INDUCE VOMITING.)

INHALATION:

THIS PRODUCT MAY BE HARMFUL BY INHALATION. VAPORS OF THIS PRODUCT MAY CAUSE IRRITATION OF THE NOSE, THROAT, AND RESPIRATORY TRACT. INHALATION OF VAPORS CAN CAUSE CNS DEPRESSION INCLUDING HEADACHE, NAUSEA, DIZZINESS AND INCOORDINATION.

-----4. FIRST AID -----

EYES:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS GET MEDICAL ATTENTION.

SKIN:

FOR SKIN CONTACT, FLUSH WITH LARGE AMOUNTS OF WATER WHILE REMOVING CONTAMINATED CLOTHING. WASH AFFECTED AREA WITH MILD SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. WASH CONTAMINATED CLOTHING BEFORE REUSE.

INGESTION:

ASPIRATION HAZARD:

IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.

INHALATION:

IF INHALED, IMMEDIATELY REMOVE THE AFFECTED PERSON TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. SEEK MEDICAL ATTENTION.

NOTE TO PHYSICIAN:

PROVIDE GENERAL SUPPORTIVE MEASURES AND TREAT SYMPTOMATICALLY.

-----5. FIRE FIGHTING MEASURES -----

FLAMMABLE PROPERTIES:

FLASH POINT: -4 DEG. F (-20.2 DEG. C)

METHOD USED: TCC

BARNES DISTRIBUTION

UPPER FLAMMABLE LIMIT (UFL): 13.2 (% VOLUME IN AIR)
LOWER FLAMMABLE LIMIT (LFL): 1.1 (% VOLUME IN AIR)

WTO IGNITION: 399.0 DEG. F (203.8 DEG. C)

FLAMMABILITY CLASSIFICATION: CLASS 1B

HAZARDOUS COMBUSTION PRODUCTS:
UPON DECOMPOSITION, THIS PRODUCT EMITS CARBON MONOXIDE, CARBON DIOXIDE AND/OR
LOW MOLECULAR WEIGHT HYDROCARBONS.

EXTINGUISHING MEDIA: DRY CHEMICAL, FOAM, CARBON DIOXIDE.

FIRE FIGHTING INSTRUCTIONS:

DANGER, EXTREMELY FLAMMABLE!
CLEAR FIRE AREA OF UNPROTECTED PERSONNEL AND ISOLATE. VAPORS ARE HEAVIER THAN
AIR AND MAY TRAVEL ALONG THE GROUND TO SOME DISTANT SOURCE OF IGNITION AND
FLASH BACK. AVOID ACCUMULATION OF WATER. FLOATING PRODUCT MAY REIGNITE ON THE
SURFACE OF THE WATER.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:
FIREFIGHTERS SHOULD WEAR FULL-FACE, SELF-CONTAINED BREATHING APPARATUS AND
IMPERVIOUS PROTECTIVE CLOTHING.

-----6. ACCIDENTAL RELEASE MEASURES -----

CONTAINMENT PROCEDURES:
ELIMINATE ALL SOURCES OF IGNITION OR FLAMMABLES THAT MAY COME INTO CONTACT WITH
A SPILL OF THIS MATERIAL. HANDLING EQUIPMENT MUST BE GROUNDED TO PREVENT
SPARKING. STOP THE FLOW OF MATERIAL, IF THIS IS WITHOUT RISK. DIKE THE SPILLED
MATERIAL, WHERE THIS IS POSSIBLE.

CLEAN-UP PROCEDURES:
ELIMINATE IGNITION SOURCES INCLUDING SOURCES OF ELECTRICAL, STATIC OR
FRICTIONAL SPARKS. VENTILATE THE CONTAMINATED AREA. ABSORB SPILL WITH INERT
MATERIAL. SHOVEL MATERIAL INTO PROPERLY LABELED CLOSED METAL CONTAINERS FOR
DISPOSAL. PLACE IN NON-LEAKING CONTAINERS FOR IMMEDIATE DISPOSAL. FLUSH AREA
WITH WATER TO REMOVE TRACE RESIDUE. DO NOT ALLOW THE SPILLED PRODUCT TO ENTER
PUBLIC DRAINAGE SYSTEM OR OPEN WATERCOURSES.

EVACUATION PROCEDURES:
PERSONS NOT WEARING APPROPRIATE PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED FROM
AREA OF SPILL UNTIL CLEAN UP HAS BEEN COMPLETED.

SPECIAL PROCEDURES:
FOLLOW ALL LOCAL, STATE, FEDERAL AND PROVINCIAL REGULATIONS FOR DISPOSAL.
NOTIFY THE PROPER AUTHORITIES IF ENTRY TO THE ENVIRONMENT OCCURS.

-----7. HANDLING & STORAGE -----

B A R N E S D I S T R I B U T I O N

HANDLING:

KEEP LIQUID AND VAPOR AWAY FROM HEAT, SPARKS AND FLAMES. SURFACES THAT ARE SUFFICIENTLY HOT MAY IGNITE LIQUID PRODUCT IN THE ABSENCE OF SPARKS OR FLAME. EXTINGUISH PILOT LIGHTS, CIGARETTES AND TURN OFF OTHER SOURCES OF IGNITION PRIOR TO USE AND UNTIL ALL VAPORS ARE GONE. VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM THE HANDLING SITE; FLASH FIRE CAN RESULT. KEEP CONTAINERS CLOSED WHEN NOT IN USE. USE WITH ADEQUATE VENTILATION.

CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, CAN CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, DRILL, GRIND, WELD OR PERFORM SIMILAR OPERATIONS ON OR NEAR CONTAINERS. DO NOT PRESSURIZE DRUM CONTAINERS TO EMPTY THEM.

STATIC ELECTRICITY MAY ACCUMULATE AND CREATE A FIRE HAZARD. GROUND FIXED EQUIPMENT. BOND AND GROUND TRANSFER CONTAINERS AND EQUIPMENT.

WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING, APPLYING COSMETICS, OR USING TOILET FACILITIES. AIR-DRY CONTAMINATED CLOTHING IN A WELL VENTILATED AREA BEFORE LAUNDERING.

STORAGE:

KEEP PACKAGED IN ORIGINAL, LABELED CONTAINERS UNTIL USE. STORE IN A COOL, DRY, WELL-VENTILATED AREA. STORE THIS PRODUCT IN AIRTIGHT CONTAINERS AWAY FROM SOURCES OF HEAT AND LIGHT. GROUND ALL EQUIPMENT TO PREVENT ACCUMULATION OF STATIC CHARGE. STORE AWAY FROM INCOMPATIBLE MATERIALS. DO NOT REMOVE OR DEFACE LABEL. DO NOT REUSE CONTAINER WITHOUT RECYCLING OR RECONDITIONING IN ACCORDANCE WITH ANY FEDERAL, PROVINCIAL, STATE OR LOCAL LAWS. DO NOT USE CUTTING OR WELDING TORCHES, OPEN FLAMES, OR ELECTRIC ARCS ON EMPTY OR FULL CONTAINERS.

-----8. EXPOSURE CONTROLS/PERSONAL PROTECTION -----

ENGINEERING CONTROLS:

PROVIDE ADEQUATE LOCAL EXHAUST VENTILATION TO MAINTAIN WORKER EXPOSURE BELOW EXPOSURE LIMITS.

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION:

WEAR SAFETY GLASSES. CHEMICAL GOGGLES AND/OR FACE SHIELDS SHOULD BE WORN, WHEN SPLASHING IS A POSSIBILITY. CONTACT LENSES SHOULD NOT BE EXPOSED. IF VAPOR EXPOSURE CAUSES EYE DISCOMFORT, USE A FULL-FACE RESPIRATOR.

SKIN PROTECTION:

USE IMPERVIOUS GLOVES. USE OF IMPERVIOUS APRON AND BOOTS ARE RECOMMENDED. WASH CONTAMINATED CLOTHING BEFORE REUSE.

RESPIRATORY PROTECTION:

IF RECOMMENDED EXPOSURE LIMITS ARE EXCEEDED, A NIOSH-APPROVED, CONTINUOUS FLOW SUPPLIED AIR-RESPIRATOR, HOOD OR HELMET IS ACCEPTABLE.

EXPOSURE GUIDELINE(S):

B A R N E S D I S T R I B U T I O N

COMPONENT EXPOSURE LIMITS:

KEX TIRE REPAIR, RECOMMENDS THAT ITS CUSTOMERS MINIMIZE EMPLOYEE EXPOSURE. KEX THEREFORE SUGGESTS THAT ITS CUSTOMERS CONSIDER ADOPTING THE LOWER OF THE CURRENT OSHA PEL OR THE ACGIH TLV'S FOR THE PURPOSE OF EVALUATING EMPLOYEE EXPOSURES. THE TLV'S RECOMMENDED BY THE ACGIH HAVE BEEN UPDATED ON A CONTINUING BASIS.

HEPTANE (n-) (142-82-5):

ACGIH:

400 PPM TWA
500 PPM STEL

OSHA:

500 PPM TWA
2000 MG/M3 TWA

NIOSH:

85 PPM TWA
350 MG/M3 TWA
440 PPM CEILING (15 MIN)
1800 MG/M3 CEILING (15 MIN)

ACETONE (67-64-1):

ACGIH:

500 PPM TWA
750 PPM STEL

OSHA:

1000 PPM TWA
2400 MG/M3 TWA

NIOSH:

250 PPM TWA
590 MG/M3 TWA

COMPONENT EXPOSURE LIMITS - CANADA:

THE FOLLOWING PROVINCIAL EXPOSURE LIMITS APPLY FOR THIS PRODUCT'S COMPONENTS.

HEPTANE (n-) (142-82-5):

ALBERTA:

400 PPM TWA
1640 MG/M3 TWA
500 PPM STEL
2050 MG/M3 STEL

BRITISH COLUMBIA:

400 PPM TWA
500 PPM STEL

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MANITOBA:
400 PPM TWA
1600 MG/M3 TWA
500 PPM STEL
2000 MG/M3 STEL

NEW BRUNSWICK:
400 PPM TWA
1640 MG/M3 TWA
500 PPM STEL
2050 MG/M3 STEL

NW TERRITORIES:
400 PPM TWA
1640 MG/M3 TWA
500 PPM STEL
2049 MG/M3 STEL

NOVA SCOTIA:
400 PPM TWA
500 PPM STEL

NUNAVUT:
400 PPM TWA
1640 MG/M3 TWA
500 PPM STEL
2049 MG/M3 STEL

ONTARIO:
400 PPM TWAEV
1635 MG/M3 TWAEV
500 PPM STEV
2045 MG/M3 STEV

QUEBEC:
400 PPM TWAEV
1640 MG/M3 TWAEV
500 PPM STEV
2050 MG/M3 STEV

SASKATCHEWAN:
1640 MG/M3 TWA
400 PPM TWA
2050 MG/M3 STEL
500 PPM STEL

YUKON:
400 PPM TWA
1600 MG/M3 TWA
500 PPM STEL
2000 MG/M3 STEL

ACETONE (67-64-1):

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ALBERTA:
750 PPM TWA
1800 MG/M3 TWA
1000 PPM STEL
2400 MG/M3 STEL

BRITISH COLUMBIA:
250 PPM TWA
500 PPM STEL

MANITOBA:
750 PPM TWA
1780 MG/M3 TWA
1000 PPM STEL
2375 MG/M3 STEL

NEW BRUNSWICK:
500 PPM TWA
1188 MG/M3 TWA
750 PPM STEL
1782 MG/M3 STEL

NW TERRITORIES:
1000 PPM TWA
2370 MG/M3 TWA
1250 PPM STEL
2970 MG/M3 STEL

NOVA SCOTIA:
500 PPM TWA
750 PPM STEL

NUNAVUT:
1000 PPM TWA
2370 MG/M3 TWA
1250 PPM STEL
2970 MG/M3 STEL

ONTARIO:
500 PPM TWAEV
750 PPM STEV

QUEBEC:
750 PPM TWAEV
1780 MG/M3 TWAEV
1000 PPM STEV
2380 MG/M3 STEV

SASKATCHEWAN:
1780 MG/M3 TWA
750 PPM TWA
2380 MG/M3 STEL

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1000 PPM STEL

YUKON:

1000 PPM TWA

2400 MG/M3 TWA

1250 PPM STEL

3000 MG/M3 STEL

-----9. PHYSICAL & CHEMICAL PROPERTIES -----

APPEARANCE: CLEAR

ODOR: LIGHT HYDROCARBON

ODOR THRESHOLD: NOT AVAILABLE

BOILING POINT: 133-200 DEG. F (56.6-93.3 DEG. C) @ 760 MMHg (CONCENTRATE ONLY)

SOLUBILITY IN WATER: <25%

SPECIFIC GRAVITY: 0.673 @ 77 DEG. F (CONCENTRATE ONLY)

VAPOR PRESSURE: 186 MMHg @ 68.00 DEG. F (FOR PRODUCT)

% VOLATILE: 676 G/L LESS 135 G/L (EXEMPT VOC)

-----10. STABILITY & REACTIVITY -----

INCOMPATIBILITY WITH OTHER MATERIALS:
THIS PRODUCT MAY REACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

DECOMPOSITION PRODUCTS:
UPON DECOMPOSITION, THIS PRODUCT EMITS CARBON MONOXIDE, CARBON DIOXIDE AND/OR
LOW MOLECULAR WEIGHT HYDROCARBONS.

-----11. TOXICOLOGICAL INFORMATION -----

ACUTE TOXICITY:

THROUGH INHALATION, INGESTION OR PASSAGE OF THE MATERIAL THROUGH THE SKIN THE
FOLLOWING SYMPTOMS MAY OCCUR:
STOMACH OR INTESTINAL UPSET (NAUSEA, VOMITING, DIARRHEA); IRRITATION (NOSE,
THROAT, AIRWAY); CENTRAL NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS,
WEAKNESS, FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS); TEMPORARY CHANGES IN
MOOD AND BEHAVIOR; LOSS OF APPETITE; LOSS OF COORDINATION; IRREGULAR HEARTBEAT;
NARCOSIS (DAZED OR SLUGGISH FEELING).

CHRONIC TOXICITY:

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PROLONGED OR REPEATED LIQUID CONTACT CAN RESULT IN DEFATTING AND DRYING OF THE SKIN, WHICH MAY RESULT IN SKIN IRRITATION AND DERMATITIS.

CARCINOGENICITY: NO CARCINOGENICITY DATA AVAILABLE FOR THIS PRODUCT.

COMPONENT CARCINOGENICITY:

ACETONE (67-64-1):

ACGIH:

A4 - NOT CLASSIFIABLE AS A HUMAN CARCINOGEN

-----12. ECOLOGICAL INFORMATION -----

THIS PRODUCT IS TOXIC TO AQUATIC ORGANISMS. THIS PRODUCT MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

COMPONENT ANALYSIS - ECOTOXICITY - AQUATIC TOXICITY:

HEPTANE (n-) (142-82-5):

TEST & SPECIES	CONDITIONS
24 Hr LC50 GOLDFISH	4.0 MG/L
24 Hr LC50 MOSQUITO FISH	4900 MG/L
96 Hr LC50 CICHLID FISH	375.0 MG/L

ACETONE (67-64-1):

TEST & SPECIES	CONDITIONS
96 Hr LC50 RAINBOW TROUT	5540 MG/L STATIC
96 Hr LC50 FATHEAD MINNOW	6210 MG/L FLOW-THROUGH
96 Hr LC50 BLUEGILL	8300 MG/L STATIC
48 Hr LC50 WATER FLEA	0.0039 MG/L
48 Hr EC50 WATER FLEA	12700 MG/L STATIC

-----13. DISPOSAL CONSIDERATIONS -----

DISPOSAL:

WASTE MUST BE HANDLED IN ACCORDANCE WITH ALL FEDERAL, STATE, PROVINCIAL, AND LOCAL REGULATIONS.

UNUSED & UNCONTAMINATED PRODUCT:

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COMPONENT WASTE NUMBERS:

ACETONE (67-64-1):

RCRA: WASTE NUMBER U002 (IGNITABLE WASTE)

D001 (IGNITABLE): THIS IS A CHARACTERISTIC WASTE ID.

-----14. TRANSPORT INFORMATION -----

US DOT INFORMATION:

SHIPPING NAME: FLAMMABLE LIQUIDS, N.O.S. (CONTAINS: HEPTANE (n-))

UN/NA #: UN1993

HAZARD CLASS: 3

PACKING GROUP: II

REQUIRED LABEL(S): FLAMMABLE LIQUID

ADDITIONAL INFO.:

PLACARD (WHEN REQUIRED): FLAMMABLE LIQUID, 3

EXCEPTIONS: DOT PARAGRAPHS 173.150, 173.202, & 173.242.

ALTERNATE SHIPPING ARRANGEMENTS:

BASED ON PACKAGE OR SHIPPING CONTAINER SIZE, THIS PRODUCT MAY BE SHIPPED AS A, "LIMITED QUANTITY", OR, RENAMED, "CONSUMER COMMODITY" AND RECLASSIFIED AS, "ORM-D" MATERIAL.

TDG INFORMATION:

SHIPPING NAME: FLAMMABLE LIQUID, N.O.S. (CONTAINS: HEPTANE (n-))

UN/NA #: UN1993

HAZARD CLASS: 3

PACKING GROUP: II

REQUIRED LABEL(S): FLAMMABLE LIQUID

IMDG INFORMATION:

ADDITIONAL INFO.:

EMS NO = F-E, S-E

EXCEPTIONS:

FOR PACKAGE AND CONTAINER SIZE WHEN SHIPPED AS LIMITED QUANTITY UNDER PACKAGING INSTRUCTION P001, REVISION PP1 AND CHAPTER 3.4 (LIMITED QUANTITY).

IATA INFORMATION:

ADDITIONAL INFO.: 3

-----15. REGULATORY INFORMATION -----

US FEDERAL REGULATIONS:

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SARA 313 INFORMATION:

COMPONENT ANALYSIS:

NONE OF THIS PRODUCTS COMPONENTS ARE LISTED UNDER SARA SECTION 313 (40 CFR 372.65).

SARA HAZARD CATEGORY:

ACUTE HEALTH: YES
CHRONIC HEALTH: YES
FIRE: YES
PRESSURE: NO
REACTIVE: NO

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA):

COMPONENT ANALYSIS:

THIS MATERIAL CONTAINS ONE OR MORE OF THE FOLLOWING CHEMICALS REQUIRED TO BE IDENTIFIED UNDER CERCLA (40 CFR 302.4).

ACETONE (67-64-1):

CERCLA:

5000 LB FINAL RQ
2270 KG FINAL RQ

TOXIC SUBSTANCES CONTROL ACT (TSCA):

ALL COMPONENTS ARE ON THE U.S. EPA TSCA INVENTORY LIST.

COMPONENT ANALYSIS - INVENTORY:

COMPONENT	CAS #	TSCA	CAN	EEC
HEPTANE (n-)	142-82-5	YES	DSL	EINECS
ACETONE	67-64-1	YES	DSL	EINECS

STATE RIGHT-TO-KNOW:

COMPONENT ANALYSIS: STATE

THE FOLLOWING COMPONENTS APPEAR ON ONE OR MORE OF THE FOLLOWING STATE HAZARDOUS SUBSTANCES LISTS:

COMPONENT	CAS	CA	MA	MN	NJ	PA	RI
HEPTANE (n-)	142-82-5	YES	YES	YES	YES	YES	YES
ACETONE	67-64-1	YES	YES	YES	YES	YES	YES

CANADIAN REGULATIONS:

WHMIS INFORMATION:

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WHMIS CLASSIFICATION: B2, D2B

COMPONENT ANALYSIS - WHMIS IDL:

THE FOLLOWING COMPONENTS ARE IDENTIFIED UNDER THE CANADIAN HAZARDOUS PRODUCTS ACT INGREDIENT DISCLOSURE LIST:

COMPONENT	CAS #	MINIMUM CONCENTRATION
HEPTANE (n-)	142-82-5	1%
ACETONE	67-64-1	1%

EUROPE:

COMPONENT ANALYSIS:

COMPONENT (CAS#)	EC #
HEPTANE (n-) (142-82-5)	205-563-8
ACETONE (67-64-1)	200-662-2

-----16. OTHER INFORMATION -----

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

NFPA RATINGS:
HEALTH 1
FIRE 3
REACTIVITY 0

HAZARD SCALE:

0 = MINIMAL
1 = SLIGHT
2 = MODERATE
3 = SERIOUS
4 = SEVERE

MEDICAL EMERGENCIES:

CALL CHEMTREC 24 HOURS A DAY FOR EMERGENCY INFORMATION

FOR ANY OTHER INFORMATION:

KEX TIRE REPAIR
10250 INDUSTRIAL BLVD.
COVINGTON, GA 30014
800-908-7362

NOTICE:

KEX TIRE REPAIR, BELIEVES THAT THE INFORMATION CONTAINED ON THIS MATERIAL SAFETY DATA SHEET IS ACCURATE. THE SUGGESTED PROCEDURES ARE BASED ON EXPERIENCE

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898011

SA

STANDARD ABRASIVES(TM)

MATERIAL SAFETY DATA SHEET STANDARD ABRASIVES(TM) BUFF AND BLEND GP
A-VFN/FIN/MED DISCS, ROLLS, WHEELS, BELTS, CROSS BUFFS, SQUARE BUFFS,
CIRCLE BUFFS, FLUTTER BUFFS, HD-A-MED FLAP BRUSH, MOUNTED FLAP BRUSH,
QUICK CHANGE

04/26/11

MATERIAL SAFETY DATA SHEET

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-----SECTION 1: PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME:

STANDARD ABRASIVES(TM) BUFF AND BLEND GP A-VFN/FIN/MED DISCS, ROLLS, WHEELS,
BELTS, CROSS BUFFS, SQUARE BUFFS, CIRCLE BUFFS, FLUTTER BUFFS, HD-A-MED FLAP
BRUSH, MOUNTED FLAP BRUSH, QUICK CHANGE

MANUFACTURER: 3M

DIVISION: ABRASIVES SYSTEMS DIVISION

ADDRESS:

3M CENTER
ST. PAUL, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 OR (651) 737-6501 (24 HOURS)

ISSUE DATE: 04/26/11

SUPERCEDES DATE: 01/25/11

DOCUMENT GROUP: 28-2831-7

PRODUCT USE:

INTENDED USE: ABRASIVE PRODUCT

-----SECTION 2: INGREDIENTS -----

B A R N E S D I S T R I B U T I O N

INGREDIENT	C.A.S. NO.	% BY WT
ALUMINUM OXIDE MINERAL	1344-28-1	30 - 60
FILLER	13983-17-0	5 - 15
ADDITIVE	13463-67-7	0.25 - 2.5
CURED RESIN	MIXTURE	10 - 35
NYLON FIBER	MIXTURE	10 - 20
FIBERGLASS OR STEEL CORE	MIXTURE	0 - 10
QUICK CHANGE ATTACHMENT: TP, TR, TS	MIXTURE	0 - 5

-----SECTION 3: HAZARDS IDENTIFICATION -----

3.1 EMERGENCY OVERVIEW:

ODOR, COLOR, GRADE: SOLID ABRASIVE PRODUCT

GENERAL PHYSICAL FORM: SOLID

IMMEDIATE HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS:
THIS DOCUMENT COVERS ONLY THE STANDARD ABRASIVES PRODUCT. FOR COMPLETE ASSESSMENT, WHEN DETERMINING THE DEGREE OF HAZARD, THE MATERIAL BEING ABRADED MUST ALSO BE CONSIDERED.

3.2 POTENTIAL HEALTH EFFECTS:

EYE CONTACT:

MECHANICAL EYE IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE PAIN, REDNESS, TEARING AND CORNEAL ABRASION.

DUST CREATED BY GRINDING, SANDING, OR MACHINING MAY CAUSE EYE IRRITATION. SIGNS/SYMPTOMS MAY INCLUDE REDNESS, SWELLING, PAIN, TEARING, AND BLURRED OR HAZY VISION.

SKIN CONTACT:

MECHANICAL SKIN IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE ABRASION, REDNESS, PAIN, AND ITCHING.

INHALATION:
DUST FROM GRINDING, SANDING OR MACHINING MAY CAUSE IRRITATION OF THE RESPIRATORY SYSTEM. SIGNS/SYMPTOMS MAY INCLUDE COUGH, SNEEZING, NASAL DISCHARGE, HEADACHE, HOARSENESS, AND NOSE AND THROAT PAIN.

PROLONGED OR REPEATED EXPOSURE MAY CAUSE:

B A R N E S D I S T R I B U T I O N

PNEUMOCONIOSIS:

SIGN/SYMPTOMS MAY INCLUDE PERSISTENT COUGH, BREATHLESSNESS, CHEST PAIN, INCREASED AMOUNTS OF SPUTUM, AND CHANGES IN LUNG FUNCTION TESTS.

INGESTION:

GASTROINTESTINAL IRRITATION:

SIGNS/SYMPTOMS MAY INCLUDE ABDOMINAL PAIN, STOMACH UPSET, NAUSEA, VOMITING AND DIARRHEA.

-----SECTION 4: FIRST AID MEASURES -----

4.1 FIRST AID PROCEDURES:

THE FOLLOWING FIRST AID RECOMMENDATIONS ARE BASED ON AN ASSUMPTION THAT APPROPRIATE PERSONAL AND INDUSTRIAL HYGIENE PRACTICES ARE FOLLOWED.

EYE CONTACT:

FLUSH EYES WITH LARGE AMOUNTS OF WATER. IF SIGNS/SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

SKIN CONTACT:

WASH AFFECTED AREA WITH SOAP AND WATER. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

INHALATION:

REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

IF SWALLOWED:

DO NOT INDUCE VOMITING UNLESS INSTRUCTED TO DO SO BY MEDICAL PERSONNEL. GIVE VICTIM TWO GLASSES OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.

-----SECTION 5: FIRE FIGHTING MEASURES -----

5.1 FLAMMABLE PROPERTIES:

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS (LEL): NOT APPLICABLE

FLAMMABLE LIMITS (UEL): NOT APPLICABLE

5.2 EXTINGUISHING MEDIA:

ORDINARY COMBUSTIBLE MATERIAL. USE FIRE EXTINGUISHERS WITH CLASS A EXTINGUISHING AGENTS (E.G., WATER, FOAM).

5.3 PROTECTION OF FIRE FIGHTERS:

SPECIAL FIRE FIGHTING PROCEDURES:

WEAR FULL PROTECTIVE EQUIPMENT (BUNKER GEAR) AND A SELF-CONTAINED BREATHING

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APPARATUS (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS:
NOT APPLICABLE. NONE INHERENT IN THIS PRODUCT.

NOTE:
SEE STABILITY AND REACTIVITY (SECTION 10) FOR HAZARDOUS COMBUSTION AND THERMAL DECOMPOSITION INFORMATION.

-----SECTION 6: ACCIDENTAL RELEASE MEASURES -----

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
NOT APPLICABLE.

6.2. ENVIRONMENTAL PRECAUTIONS: NOT APPLICABLE.

CLEAN-UP METHODS: NOT APPLICABLE.

IN THE EVENT OF A RELEASE OF THIS MATERIAL, THE USER SHOULD DETERMINE IF THE RELEASE QUALIFIES AS REPORTABLE ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS.

-----SECTION 7: HANDLING AND STORAGE -----

7.1 HANDLING:

FOR INDUSTRIAL OR PROFESSIONAL USE ONLY. AVOID BREATHING OF DUST CREATED BY SANDING, GRINDING OR MACHINING. AVOID EYE CONTACT WITH DUST OR AIRBORNE PARTICLES. DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. WASH EXPOSED AREAS THOROUGHLY WITH SOAP AND WATER. DAMAGED PRODUCT CAN BREAK APART DURING USE AND CAUSE SERIOUS INJURY TO FACE OR EYES. CHECK PRODUCT FOR DAMAGE SUCH AS CRACKS OR NICKS PRIOR TO USE. REPLACE IF DAMAGED. ALWAYS WEAR EYE AND FACE PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS. SPARKS AND PARTICLES FLYING FROM THE PRODUCT DURING SANDING OR GRINDING CAN CAUSE INJURY AND FIRE.

7.2 STORAGE: STORE IN A COOL, DRY PLACE.

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

8.1 ENGINEERING CONTROLS:

PROVIDE APPROPRIATE LOCAL EXHAUST VENTILATION FOR SANDING, GRINDING OR MACHINING. PROVIDE VENTILATION ADEQUATE TO CONTROL DUST CONCENTRATIONS BELOW RECOMMENDED EXPOSURE LIMITS AND/OR CONTROL DUST. USE GENERAL DILUTION VENTILATION AND/OR LOCAL EXHAUST VENTILATION TO CONTROL AIRBORNE EXPOSURES TO BELOW OCCUPATIONAL EXPOSURE LIMITS AND/OR CONTROL DUST, FUME, OR AIRBORNE PARTICLES. IF VENTILATION IS NOT ADEQUATE, USE RESPIRATORY PROTECTION EQUIPMENT.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE):

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8.2.1 EYE/FACE PROTECTION:

AVOID EYE CONTACT. TO MINIMIZE THE RISK OF INJURY TO FACE AND EYES, ALWAYS WEAR EYE AND FACE PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS.

THE FOLLOWING EYE PROTECTION(S) ARE RECOMMENDED:

SAFETY GLASSES WITH SIDE SHIELDS

8.2.2 SKIN PROTECTION:

AVOID SKIN CONTACT. WEAR APPROPRIATE GLOVES TO MINIMIZE RISK OF INJURY TO SKIN FROM CONTACT WITH DUST OR PHYSICAL ABRASION FROM GRINDING OR SANDING.

8.2.3 RESPIRATORY PROTECTION:

AVOID BREATHING OF DUST CREATED BY SANDING, GRINDING OR MACHINING. ASSESS EXPOSURE CONCENTRATIONS OF ALL MATERIALS INVOLVED IN THE WORK PROCESS. CONSIDER MATERIAL BEING ABRADED WHEN DETERMINING THE APPROPRIATE RESPIRATORY PROTECTION. SELECT AND USE APPROPRIATE RESPIRATORS TO PREVENT INHALATION OVEREXPOSURE.

SELECT ONE OF THE FOLLOWING NIOSH APPROVED RESPIRATORS BASED ON AIRBORNE CONCENTRATION OF CONTAMINANTS AND IN ACCORDANCE WITH OSHA REGULATIONS:

HALF FACEPIECE OR FULLFACE AIR-PURIFYING RESPIRATOR WITH N95 PARTICULATE FILTERS

SELECT AND USE RESPIRATORY PROTECTION TO PREVENT AN INHALATION EXPOSURE BASED ON THE RESULTS OF AN EXPOSURE ASSESSMENT. CONSULT WITH YOUR RESPIRATOR MANUFACTURER FOR SELECTION OF APPROPRIATE TYPES OF RESPIRATORS.

8.2.4 PREVENTION OF SWALLOWING:

NOT AN EXPECTED ROUTE OF EXPOSURE. WASH HANDS AFTER HANDLING AND BEFORE EATING.

8.3 EXPOSURE GUIDELINES:

INGREDIENT	AUTHORITY	TYPE	LIMIT	ADDITIONAL INFORMATION
ALUMINUM OXIDE MINERAL	CMRG	TWA	1 FIBER/CC	
ALUMINUM OXIDE MINERAL	OSHA	TWA, RESPIRABLE FRACTION	5 MG/M3	
ALUMINUM OXIDE MINERAL	OSHA	TWA, AS TOTAL DUST	15 MG/M3	

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

CMRG: CHEMICAL MANUFACTURER RECOMMENDED GUIDELINE

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

BARNES DISTRIBUTION

AIHA:
AMERICAN INDUSTRIAL HYGIENE ASSOCIATION WORKPLACE ENVIRONMENTAL EXPOSURE
LEVEL (WEEL)

-----SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES -----

ODOR, COLOR, GRADE: SOLID ABRASIVE PRODUCT

GENERAL PHYSICAL FORM: SOLID

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS (LEL): NOT APPLICABLE

FLAMMABLE LIMITS (UEL): NOT APPLICABLE

BOILING POINT: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

SPECIFIC GRAVITY: NOT APPLICABLE

pH: NOT APPLICABLE

MELTING POINT: NOT APPLICABLE

SOLUBILITY IN WATER: NOT APPLICABLE

EVAPORATION RATE: NOT APPLICABLE

KOW - OCT/WATER PARTITION COEF: NOT APPLICABLE

VISCOSITY: NOT APPLICABLE

-----SECTION 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE.

MATERIALS AND CONDITIONS TO AVOID:

10.1 CONDITIONS TO AVOID: NONE KNOWN

10.2 MATERIALS TO AVOID: NONE KNOWN

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

ORDER NO: 5204759 RELEASE NO: 001 MSDS NO: 016654

BARNES DISTRIBUTION

SUBSTANCE	CONDITION
CARBON MONOXIDE	DURING COMBUSTION
CARBON DIOXIDE	DURING COMBUSTION

HAZARDOUS DECOMPOSITION:

UNDER RECOMMENDED USAGE CONDITIONS, HAZARDOUS DECOMPOSITION PRODUCTS ARE NOT EXPECTED. HAZARDOUS DECOMPOSITION PRODUCTS MAY OCCUR AS A RESULT OF OXIDATION, HEATING, OR REACTION WITH ANOTHER MATERIAL.

-----SECTION 11: TOXICOLOGICAL INFORMATION -----

PLEASE CONTACT THE ADDRESS LISTED IN SECTION 1 OF THIS MSDS FOR TOXICOLOGICAL INFORMATION ON THIS MATERIAL AND/OR ITS COMPONENTS.

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOTOXICOLOGICAL INFORMATION: NOT DETERMINED.

CHEMICAL FATE INFORMATION: NOT DETERMINED.

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:

THE SUBSTRATE THAT WAS ABRADED MUST BE CONSIDERED AS A FACTOR IN THE DISPOSAL METHOD FOR THIS PRODUCT. DISPOSE OF WASTE PRODUCT IN A SANITARY LANDFILL. AS A DISPOSAL ALTERNATIVE, DISPOSE OF WASTE PRODUCT IN A FACILITY PERMITTED TO ACCEPT CHEMICAL WASTE.

EPA HAZARDOUS WASTE NUMBER (RCRA): NOT REGULATED

SINCE REGULATIONS VARY, CONSULT APPLICABLE REGULATIONS OR AUTHORITIES BEFORE DISPOSAL.

-----SECTION 14: TRANSPORT INFORMATION -----

NOT REGULATED PER U.S. DOT, IATA OR IMO.

THESE TRANSPORTATION CLASSIFICATIONS ARE PROVIDED AS A CUSTOMER SERVICE. AS THE SHIPPER YOU REMAIN RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS, INCLUDING PROPER TRANSPORTATION CLASSIFICATION AND PACKAGING. THE MANUFACTURER'S TRANSPORTATION CLASSIFICATIONS ARE BASED ON PRODUCT FORMULATION, PACKAGING, THE MANUFACTURER'S POLICIES AND UNDERSTANDING OF APPLICABLE CURRENT REGULATIONS. THE MANUFACTURER DOES NOT GUARANTEE THE ACCURACY OF THIS CLASSIFICATION INFORMATION. THIS INFORMATION APPLIES ONLY TO TRANSPORTATION CLASSIFICATION AND NOT THE PACKAGING, LABELING, OR MARKING REQUIREMENTS. THE ORIGINAL STANDARD ABRASIVES PACKAGE IS CERTIFIED FOR U.S.

ORDER NO: 5204759 RELEASE NO: 001 MSDS NO: 016654

BARNES DISTRIBUTION
GROUND SHIPMENT ONLY. IF YOU ARE SHIPPING BY AIR OR OCEAN, THE PACKAGE MAY
NOT MEET APPLICABLE REGULATORY REQUIREMENTS.

-----SECTION 15: REGULATORY INFORMATION -----

US FEDERAL REGULATIONS: CONTACT THE MANUFACTURER FOR MORE INFORMATION.

311/312 HAZARD CATEGORIES:

FIRE HAZARD: NO
PRESSURE HAZARD: NO
REACTIVITY HAZARD: NO
IMMEDIATE HAZARD: YES
DELAYED HAZARD: YES

SECTION 313 TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF THAT
SECTION AND 40 CFR PART 372 (EPCRA):

INGREDIENT	C.A.S. NO	% BY WT
ALUMINUM OXIDE MINERAL	1344-28-1	30 - 60

STATE REGULATIONS: CONTACT THE MANUFACTURER FOR MORE INFORMATION.

CHEMICAL INVENTORIES:

THIS PRODUCT IS AN ARTICLE AS DEFINED BY TSCA REGULATIONS, AND IS EXEMPT
FROM TSCA INVENTORY LISTING REQUIREMENTS.

CONTACT THE MANUFACTURER FOR MORE INFORMATION.

INTERNATIONAL REGULATIONS: CONTACT THE MANUFACTURER FOR MORE INFORMATION.

THIS MSDS HAS BEEN PREPARED TO MEET THE U.S. OSHA HAZARD COMMUNICATION
STANDARD, 29 CFR 1910.1200.

-----SECTION 16: OTHER INFORMATION -----

NFPA HAZARD CLASSIFICATION:

HEALTH 1
FLAMMABILITY 1
REACTIVITY 0
SPECIAL HAZARDS NONE

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS ARE DESIGNED
FOR USE BY EMERGENCY RESPONSE PERSONNEL TO ADDRESS THE HAZARDS THAT ARE
PRESENTED BY SHORT-TERM, ACUTE EXPOSURE TO A MATERIAL UNDER CONDITIONS OF
FIRE, SPILL, OR SIMILAR EMERGENCIES. HAZARD RATINGS ARE PRIMARILY BASED ON
THE INHERENT PHYSICAL AND TOXIC PROPERTIES OF THE MATERIAL BUT ALSO INCLUDE
THE TOXIC PROPERTIES OF COMBUSTION OR DECOMPOSITION PRODUCTS THAT ARE KNOWN
TO BE GENERATED IN SIGNIFICANT QUANTITIES.

REVISION CHANGES: NOT APPLICABLE

B A R N E S D I S T R I B U T I O N

DISCLAIMER:

THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET (MSDS) IS BELIEVED TO BE CORRECT AS OF THE DATE ISSUED. THE MANUFACTURER MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. USER IS RESPONSIBLE FOR DETERMINING WHETHER THE STANDARD ABRASIVES PRODUCT IS FIT FOR A PARTICULAR PURPOSE AND SUITABLE FOR USER'S METHOD OF USE OR APPLICATION. GIVEN THE VARIETY OF FACTORS THAT CAN AFFECT THE USE AND APPLICATION OF A STANDARD ABRASIVES PRODUCT, SOME OF WHICH ARE UNIQUELY WITHIN THE USER'S KNOWLEDGE AND CONTROL, IT IS ESSENTIAL THAT THE USER EVALUATE THE STANDARD ABRASIVES PRODUCT TO DETERMINE WHETHER IT IS FIT FOR A PARTICULAR PURPOSE AND SUITABLE FOR USER'S METHOD OF USE OR APPLICATION.

THE MANUFACTURER PROVIDES INFORMATION IN ELECTRONIC FORM AS A SERVICE TO ITS CUSTOMERS. DUE TO THE REMOTE POSSIBILITY THAT ELECTRONIC TRANSFER MAY HAVE RESULTED IN ERRORS, OMISSIONS OR ALTERATIONS IN THIS INFORMATION, THE MANUFACTURER MAKES NO REPRESENTATIONS AS TO ITS COMPLETENESS OR ACCURACY. IN ADDITION, INFORMATION OBTAINED FROM A DATABASE MAY NOT BE AS CURRENT AS THE INFORMATION IN THE MSDS AVAILABLE DIRECTLY FROM THE MANUFACTURER. STANDARD ABRASIVES IS TRADEMARK OF 3M.

STANDARD ABRASIVES USA MSDSS ARE AVAILABLE AT WWW.STANDARDABRASIVES.COM

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ORDER NO: 6302710 RELEASE NO: 001 MSDS NO: 008772

BARNES DISTRIBUTION

Synonyms: BD1491 BD1491-1
MSDS DOCUMENT

PRODUCT:
PRIVATE LABEL: BARNES L/V RED RTV SILICONE

PRINT REV. DATE: 02/20/2013

-----1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

TRADE NAME OF THIS PRODUCT:
PRIVATE LABEL: BARNES L/V RED RTV SILICONE

MSDS ID: BD1491

MANUFACTURER:
DYNATEX INC.
350 RING ROAD
ELIZABETHTOWN, KY 42701
PHONE NUMBER: (270) 769-3385

EMERGENCY PHONE:
CHEMTREC: (800) 424-9300

REVISION DATE: 2/20/2013

NFPA:
HEALTH 2
FIRE 1
REACTIVITY 0
SPECIFIC

-----2. COMPOSITION AND INFORMATION ON INGREDIENTS -----

INGREDIENT	CAS NUMBER	WEIGHT %	ACGIH TLV	PEL	STEL
AMORPHOUS SILICA	7631-86-9	11%	10 MG/M3	6 MG/M3	NOT EST.
METHYL OXIMINO SILANE	22984-54-9	6%			
Di (ETHYLMETHYLKETOXIME) METHOXYMETHYL SILANE	83817-72-5	2%			
N-BETA-(AMINOETHYL)- GAMMA- AMINOPROPYLTRIMET HOXYSILANE	1760-24-3	2%			
ANTIMONY CHROMIUM	69991-68-0	0.2%			

BARNES DISTRIBUTION

MANGANESE TITANIUM
BROWN RUTILE

-----3. HAZARD IDENTIFICATION -----

EYE CONTACT:

DIRECT EYE CONTACT IRRITATES SLIGHTLY WITH REDNESS AND SWELLING.

INHALATION:

VAPOR OVEREXPOSURE MAY CAUSE DROWSINESS, INJURE BLOOD, LIVER AND MAY IRRITATE EYES, NOSE, AND THROAT.

INGESTION:

SMALL AMOUNTS TRANSFERRED TO THE MOUTH BY FINGERS DURING USE, ETC., SHOULD NOT INJURE. SWALLOWING LARGE AMOUNTS MAY INJURE SLIGHTLY.

SKIN CONTACT:

A SINGLE SHORT TERM EXPOSURE (LESS THAN 24 HOURS) MAY IRRITATE. REPEATED PROLONGED CONTACT (24 TO 48 HOURS) MAY IRRITATE MODERATELY. PRODUCT CONTAINS OXIMES WHICH ARE POSSIBLE SKIN SENSITIZERS.

SYMPTOMS OF OVEREXPOSURE: NO KNOWN APPLICABLE INFORMATION.

EXISTING CONDITIONS AGGRAVATED BY EXPOSURE: NO KNOWN APPLICABLE INFORMATION.

COMMENT:

METHYL ETHYL KETOXIME (MEKO) IS FORMED UPON CONTACT WITH WATER OR HUMID AIR. MALE RODENTS EXPOSED TO MEKO VAPOR THROUGHOUT THEIR LIFETIME DEVELOPED LIVER TUMORS. SINCE MANY COMMONLY USED CHEMICALS CAUSE LIVER TUMORS IN RATS AND MICE, ADDITIONAL TESTING IS PLANNED BY THE MEKO SUPPLIER TO DETERMINE ANY RELEVANCE TO HUMANS. UNTIL MORE DATA IS KNOWN, EXPOSURE LEVELS SHOULD BE MAINTAINED AS LOW AS POSSIBLE.

-----4. FIRST AID INFORMATION -----

EYE CONTACT:

IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. SEEK MEDICAL ATTENTION.

SKIN CONTACT:

REMOVE FROM SKIN AND WASH THOROUGHLY WITH SOAP AND WATER OR WATERLESS CLEANSER. GET MEDICAL ATTENTION IF IRRITATION OR OTHER ILL EFFECTS DEVELOP OR PERSIST.

INHALATION: REMOVE TO FRESH AIR. NO FIRST AID SHOULD BE NEEDED.

INGESTION: NO FIRST AID SHOULD BE NEEDED.

COMMENTS: TREAT ACCORDING TO PERSON'S CONDITION AND SPECIFICS OF EXPOSURE.

-----5. FIRE FIGHTING MEASURES -----

BARNES DISTRIBUTION

FLASH POINT: NOT APPLICABLE

AUTO-IGNITION TEMPERATURE: NOT DETERMINED

FLAMMABILITY LIMITS IN AIR: NOT DETERMINED

EXTINGUISHING MEDIA:

ON LARGE FIRES USE DRY CHEMICAL, FOAM, OR WATER SPRAY. ON SMALL FIRES USE CARBON DIOXIDE, DRY CHEMICAL OR WATER SPRAY. WATER CAN BE USED TO COOL FIRE EXPOSED CONTAINERS.

SPECIAL FIRE FIGHTING PROCEDURES:

SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN WHEN FIGHTING LARGE FIRES INVOLVING CHEMICALS. DETERMINE THE NEED TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. USE WATER SPRAY TO KEEP FIRE EXPOSED CONTAINERS COOL.

UNUSUAL FIRE OR EXPLOSION HAZARDS: NONE KNOWN

-----6. ACCIDENTAL RELEASE MEASURES -----

STEPS TO BE TAKEN IN CASE OF SPILL OR RELEASE:

DETERMINE WHETHER TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. OBSERVE ALL PERSONAL PROTECTION EQUIPMENT RECOMMENDATIONS DESCRIBED IN SECTIONS 5 AND 8. FOR LARGE SPILLS, PROVIDE DIKING OR OTHER APPROPRIATE CONTAINMENT TO KEEP MATERIAL FROM SPREADING. IF DIKED MATERIAL CAN BE PUMPED, STORE RECOVERED MATERIAL IN APPROPRIATE CONTAINER. FOR SMALL SPILLS, WIPE UP OR SCRAPE UP AND CONTAIN FOR SALVAGE OR DISPOSAL. CLEAN AREA AS APPROPRIATE SINCE SPILLED MATERIAL, EVEN IN SMALL QUANTITIES, MAY PRESENT A SLIP HAZARD. FINAL CLEANING MAY REQUIRE THE USE OF STEAM, SOLVENTS OR DETERGENTS. DISPOSE OF SATURATED ABSORBENT OR CLEANING MATERIALS APPROPRIATELY, SINCE SPONTANEOUS HEATING MAY OCCUR.

LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS MAY APPLY TO RELEASES AND DISPOSAL OF THIS MATERIAL, AS WELL AS THOSE MATERIALS AND ITEMS EMPLOYED IN THE CLEANUP OF RELEASES. YOU WILL NEED TO DETERMINE WHICH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS ARE APPLICABLE. SECTIONS 13 AND 15 OF THIS MSDS PROVIDE INFORMATION REGARDING CERTAIN FEDERAL AND STATE REQUIREMENTS.

-----7. HANDLING AND STORAGE -----

HANDLING:

AVOID EYE CONTACT. AVOID SKIN CONTACT. AVOID BREATHING VAPOR. KEEP CONTAINER CLOSED. DO NOT TAKE INTERNALLY. USE REASONABLE CARE.

STORAGE:

KEEP CONTAINER CLOSED AND STORE IN A COOL, WELL VENTILATED AREA, AWAY FROM WATER OR MOISTURE.

OTHER PRECAUTIONS:

PRODUCT EVOLVES METHYL ETHYL KETOXIME (MEKO) WHEN EXPOSED TO WATER OR HUMID

BARNES DISTRIBUTION

AIR. PROVIDE VENTILATION DURING USE TO CONTROL MEKO WITHIN THE EXPOSURE GUIDELINES OR USE RESPIRATORY PROTECTION.

-----8. EXPOSURE CONTROLS AND PERSONAL PROTECTION -----

EYE PROTECTION: SAFETY GOGGLES OR GLASSES WITH SIDE SHIELDS ARE RECOMMENDED.

SKIN PROTECTION:

WASH AT MEALTIMES AND END OF SHIFT. CONTAMINATED CLOTHING AND SHOES SHOULD BE REMOVED AS SOON AS PRACTICAL AND THOROUGHLY CLEANED BEFORE REUSE. CHEMICAL PROTECTIVE GLOVES ARE RECOMMENDED.

SUITABLE GLOVES: SILVER SHIELD(R*) 4H(R*)

RESPIRATORY PROTECTION:

NO RESPIRATORY PROTECTION SHOULD BE NEEDED WITH GOOD LOCAL VENTILATION.

PRECAUTIONARY MEASURES:

AVOID EYE CONTACT. AVOID SKIN CONTACT. AVOID BREATHING VAPOR. KEEP CONTAINER CLOSED. DO NOT TAKE INTERNALLY. USE REASONABLE CARE.

COMMENT:

PRODUCT EVOLVES METHYL ETHYL KETOXIME (MEKO) WHEN EXPOSED TO WATER OR HUMID AIR. PROVIDE VENTILATION DURING USE TO CONTROL METHYL ETHYL KETOXIME WITHIN THE EXPOSURE GUIDELINES OR USE RESPIRATORY PROTECTION.

NOTE:

THESE PRECAUTIONS ARE FOR ROOM TEMPERATURE HANDLING. USE AT ELEVATED TEMPERATURES OR AEROSOL/SPRAY APPLICATIONS MAY REQUIRE ADDED PRECAUTIONS. FOR FURTHER INFORMATION REGARDING AEROSOL INHALATION TOXICITY, PLEASE REFER TO THE GUIDANCE DOCUMENT REGARDING THE USE OF SILICONE-BASED MATERIALS IN AEROSOL APPLICATIONS THAT HAS BEEN DEVELOPED BY THE SILICONE INDUSTRY (WWW.SEHSC.COM).

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: PASTE

SPECIFIC GRAVITY: 1.04

COLOR/APPEARANCE: RED

ODOR: SLIGHT MEDICINAL

pH: NOT APPLICABLE

BOILING/COND. POINT: NOT APPLICABLE

MELTING/FREEZING POINT: NOT DETERMINED

SOLUBILITY: NONE IN WATER

BARNES DISTRIBUTION

VOC %: 30 G/L

PERCENT VOLATILE: NOT APPLICABLE

VISCOSITY: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

NOTE:

THE ABOVE INFORMATION IS NOT INTENDED FOR USE IN PREPARING PRODUCT SPECIFICATIONS. CONTACT ACCUMETRIC LLC BEFORE WRITING SPECIFICATIONS.

-----10. STABILITY AND REACTIVITY -----

CHEMICAL STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID:

EXPOSURE TO AIR OR MOISTURE UNTIL READY TO USE; RELEASES ABOUT 4% METHYLETHYLKETOXIME (MEKO).

-----11. TOXICOLOGICAL INFORMATION -----

PRODUCT TOXICITY INFORMATION:

ACUTE ORAL LD50: >10,000 MG/KG

ACUTE DERMAL LD50: NONE FOUND

ACUTE INHALATION LC50: NONE FOUND

AMES TEST: UNKNOWN

EPA HAZARD CLASS: EYE IRRITANT

CPSC CLASSIFICATION: EYE IRRITANT

-----12. ECOLOGICAL INFORMATION -----

ENVIRONMENTAL FATE AND DISTRIBUTION:

COMPLETE INFORMATION IS NOT YET AVAILABLE.

ENVIRONMENTAL EFFECTS: COMPLETE INFORMATION IS NOT YET AVAILABLE.

FATE AND EFFECTS IN WASTE WATER TREATMENT PLANTS:

COMPLETE INFORMATION IS NOT YET AVAILABLE.

-----13. DISPOSAL CONSIDERATIONS -----

BARNES DISTRIBUTION

WASTE DISPOSAL METHOD:

WE MAKE NO GUARANTEE OR WARRANTY OF ANY KIND THAT THE USE OR DISPOSAL OF THIS PRODUCT COMPLIES WITH ALL LOCAL, STATE, OR FEDERAL LAWS. IT IS ALSO THE OBLIGATION OF EACH USER OF THE PRODUCT MENTIONED HEREIN TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE STATUTES.

THIS PRODUCT IS NOT KNOWN TO BE REGULATED UNDER RCRA REGULATIONS. DISPOSAL OF UNUSED PORTIONS OF THIS PRODUCT AND PROCESS WASTE CONTAINING THIS PRODUCT SHOULD BE DONE ONLY AFTER A CAREFUL EVALUATION AND IN COMPLIANCE WITH ALL FEDERAL, LOCAL AND STATE LAWS.

-----14. TRANSPORTATION INFORMATION -----

DOT ROAD SHIPMENT INFORMATION: NOT SUBJECT TO DOT.

OCEAN SHIPMENT (IMDG): NOT SUBJECT TO IMDG CODE.

AIR SHIPMENT (IATA): NOT SUBJECT TO IATA REGULATIONS.

-----15. REGULATORY INFORMATION -----

THE CONTENTS OF THIS MSDS COMPLY WITH THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200.

TSCA STATUS:

ALL CHEMICAL SUBSTANCES FOUND IN THIS PRODUCT COMPLY WITH THE TOXIC SUBSTANCES CONTROL ACT INVENTORY REPORTING REQUIREMENTS.

CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED BY THE STATE OF CALIFORNIA UNDER THE SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (PROPOSITION 65) AS BEING KNOWN TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: NONE KNOWN

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: NONE

SARA TITLE III SECTION 304 CERCLA HAZARDOUS SUBSTANCES: NONE

SARA TITLE III SECTION 313 TOXIC CHEMICALS:

NONE PRESENT OR NONE PRESENT IN REGULATED QUANTITIES.

-----16. OTHER INFORMATION -----

DISCLAIMER:

THE DATA CONTAINED HEREIN IS BASED UPON INFORMATION THAT ACCUMETRIC LLC BELIEVES TO BE RELIABLE. USERS OF THIS PRODUCT HAVE THE RESPONSIBILITY TO DETERMINE THAT SUITABILITY OF USE AND TO ADOPT ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY AND PROTECTION OF PROPERTY AND PERSONS INVOLVED IN SAID USE.

ORDER NO: 6302710 RELEASE NO: 001 MSDS NO: 008772

BARNES DISTRIBUTION

ALL STATEMENTS TO SUGGESTIONS ARE MADE WITHOUT WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THE INFORMATION, THE HAZARDS CONNECTED WITH THE USE OF THE MATERIAL OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

BARNES DISTRIBUTION

Synonyms: BD1492 BD1492-1
MSDS DOCUMENT

PRODUCT PRIVATE LABEL: BARNES L/V BLUE RTV SILICONE

PRINT REV. DATE: 08/09/2011

-----1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

TRADE NAME OF THIS PRODUCT PRIVATE LABEL: BARNES L/V BLUE RTV SILICONE

MSDS ID: BD1492

MANUFACTURER:
DYNATEX INC.
350 RING ROAD
ELIZABETHTOWN, KY 42701

PHONE NUMBER: (270) 769-3385

EMERGENCY PHONE:
CHEMTREC: (800) 424-9300

REVISION DATE: 2/25/2010

NFPA:
HEALTH 2
FIRE 1
REACTIVITY 0
SPECIFIC

-----2. COMPOSITION AND INFORMATION ON INGREDIENTS -----

INGREDIENT	CAS NUMBER	WEIGHT %	ACGIH TLV	PEL	STEL
AMORPHOUS SILICA	7631-86-9	11%	10 MG/M3	6 MG/M3	NOT EST.
METHYL OXIMINO SILANE	22984-54-9	6%			
DI (ETHYLMETHYLKETOXIME) METHOXYMETHYL SILANE	83817-72-5	2%			
N-BETA- (AMINOETHYL) -GA MMA-AMINOPROPYLTRIMET HOXYSILANE	1760-24-3	2%			
ANTIMONY CHROMIUM MANGANESE TITANIUM BROWN RUTILE	69991-68-0	0.2%			

BARNES DISTRIBUTION

-----3. HAZARD IDENTIFICATION -----

EYE CONTACT: DIRECT EYE CONTACT IRRITATES SLIGHTLY WITH REDNESS AND SWELLING.

INHALATION:

VAPOR OVEREXPOSURE MAY CAUSE DROWSINESS, INJURE BLOOD, LIVER AND MAY IRRITATE EYES, NOSE, AND THROAT.

INGESTION:

SMALL AMOUNTS TRANSFERRED TO THE MOUTH BY FINGERS DURING USE, ETC., SHOULD NOT INJURE. SWALLOWING LARGE AMOUNTS MAY INJURE SLIGHTLY.

SKIN CONTACT:

A SINGLE SHORT TERM EXPOSURE (LESS THAN 24 HOURS) MAY IRRITATE. REPEATED PROLONGED CONTACT (24 TO 48 HOURS) MAY IRRITATE MODERATELY. PRODUCT CONTAINS OXIMES WHICH ARE POSSIBLE SKIN SENSITIZERS.

SYMPTOMS OF OVEREXPOSURE: NO KNOWN APPLICABLE INFORMATION.

EXISTING CONDITIONS AGGRAVATED BY EXPOSURE: NO KNOWN APPLICABLE INFORMATION.

COMMENT:

METHYL ETHYL KETOXIME (MEKO) IS FORMED UPON CONTACT WITH WATER OR HUMID AIR. MALE RODENTS EXPOSED TO MEKO VAPOR THROUGHOUT THEIR LIFETIME DEVELOPED LIVER TUMORS. SINCE MANY COMMONLY USED CHEMICALS CAUSE LIVER TUMORS IN RATS AND MICE, ADDITIONAL TESTING IS PLANNED BY THE MEKO SUPPLIER TO DETERMINE ANY RELEVANCE TO HUMANS. UNTIL MORE DATA IS KNOWN, EXPOSURE LEVELS SHOULD BE MAINTAINED AS LOW AS POSSIBLE.

-----4. FIRST AID INFORMATION -----

EYE CONTACT:

IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. SEEK MEDICAL ATTENTION.

SKIN CONTACT:

REMOVE FROM SKIN AND WASH THOROUGHLY WITH SOAP AND WATER OR WATERLESS CLEANSER. GET MEDICAL ATTENTION IF IRRITATION OR OTHER ILL EFFECTS DEVELOP OR PERSIST.

INHALATION: REMOVE TO FRESH AIR. NO FIRST AID SHOULD BE NEEDED.

INGESTION: NO FIRST AID SHOULD BE NEEDED.

COMMENTS: TREAT ACCORDING TO PERSON'S CONDITION AND SPECIFICS OF EXPOSURE.

-----5. FIRE FIGHTING MEASURES -----

FLASH POINT: NOT APPLICABLE

ORDER NO: 3557217 RELEASE NO: 001 MSDS NO: 008774

BARNES DISTRIBUTION

AUTO-IGNITION TEMPERATURE: NOT DETERMINED

FLAMMABILITY LIMITS IN AIR: NOT DETERMINED

EXTINGUISHING MEDIA:

ON LARGE FIRES USE DRY CHEMICAL, FOAM, OR WATER SPRAY. ON SMALL FIRES USE CARBON DIOXIDE, DRY CHEMICAL OR WATER SPRAY. WATER CAN BE USED TO COOL FIRE EXPOSED CONTAINERS.

SPECIAL FIRE FIGHTING PROCEDURES:

SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN WHEN FIGHTING LARGE FIRES INVOLVING CHEMICALS. DETERMINE THE NEED TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. USE WATER SPRAY TO KEEP FIRE EXPOSED CONTAINERS COOL.

UNUSUAL FIRE OR EXPLOSION HAZARDS: NONE KNOWN

-----6. ACCIDENTAL RELEASE MEASURES -----

STEPS TO BE TAKEN IN CASE OF SPILL OR RELEASE:

DETERMINE WHETHER TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. OBSERVE ALL PERSONAL PROTECTION EQUIPMENT RECOMMENDATIONS DESCRIBED IN SECTIONS 5 AND 8. FOR LARGE SPILLS, PROVIDE DIKING OR OTHER APPROPRIATE CONTAINMENT TO KEEP MATERIAL FROM SPREADING. IF DIKED MATERIAL CAN BE PUMPED, STORE RECOVERED MATERIAL IN APPROPRIATE CONTAINER. FOR SMALL SPILLS, WIPE UP OR SCRAPE UP AND CONTAIN FOR SALVAGE OR DISPOSAL. CLEAN AREA AS APPROPRIATE SINCE SPILLED MATERIAL, EVEN IN SMALL QUANTITIES, MAY PRESENT A SLIP HAZARD. FINAL CLEANING MAY REQUIRE THE USE OF STEAM, SOLVENTS OR DETERGENTS. DISPOSE OF SATURATED ABSORBENT OR CLEANING MATERIALS APPROPRIATELY, SINCE SPONTANEOUS HEATING MAY OCCUR.

LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS MAY APPLY TO RELEASES AND DISPOSAL OF THIS MATERIAL, AS WELL AS THOSE MATERIALS AND ITEMS EMPLOYED IN THE CLEANUP OF RELEASES. YOU WILL NEED TO DETERMINE WHICH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS ARE APPLICABLE. SECTIONS 13 AND 15 OF THIS MSDS PROVIDE INFORMATION REGARDING CERTAIN FEDERAL AND STATE REQUIREMENTS.

-----7. HANDLING AND STORAGE -----

HANDLING:

AVOID EYE CONTACT. AVOID SKIN CONTACT. AVOID BREATHING VAPOR. KEEP CONTAINER CLOSED. DO NOT TAKE INTERNALLY. USE REASONABLE CARE.

STORAGE:

KEEP CONTAINER CLOSED AND STORE IN A COOL, WELL VENTILATED AREA, AWAY FROM WATER OR MOISTURE.

OTHER PRECAUTIONS:

PRODUCT EVOLVES METHYL ETHYL KETOXIME (MEKO) WHEN EXPOSED TO WATER OR HUMID AIR. PROVIDE VENTILATION DURING USE TO CONTROL MEKO WITHIN THE EXPOSURE GUIDELINES OR USE RESPIRATORY PROTECTION.

BARNES DISTRIBUTION

-----8. EXPOSURE CONTROLS AND PERSONAL PROTECTION -----

EYE PROTECTION: SAFETY GOGGLES OR GLASSES WITH SIDE SHIELDS ARE RECOMMENDED.

SKIN PROTECTION:

WASH AT MEALTIMES AND END OF SHIFT. CONTAMINATED CLOTHING AND SHOES SHOULD BE REMOVED AS SOON AS PRACTICAL AND THOROUGHLY CLEANED BEFORE REUSE. CHEMICAL PROTECTIVE GLOVES ARE RECOMMENDED.

SUITABLE GLOVES: SILVER SHIELD(R*) 4H(R*)

RESPIRATORY PROTECTION:

NO RESPIRATORY PROTECTION SHOULD BE NEEDED WITH GOOD LOCAL VENTILATION.

PRECAUTIONARY MEASURES:

AVOID EYE CONTACT. AVOID SKIN CONTACT. AVOID BREATHING VAPOR. KEEP CONTAINER CLOSED. DO NOT TAKE INTERNALLY. USE REASONABLE CARE.

COMMENT:

PRODUCT EVOLVES METHYL ETHYL KETOXIME (MEKO) WHEN EXPOSED TO WATER OR HUMID AIR. PROVIDE VENTILATION DURING USE TO CONTROL METHYL ETHYL KETOXIME WITHIN THE EXPOSURE GUIDELINES OR USE RESPIRATORY PROTECTION.

NOTE:

THESE PRECAUTIONS ARE FOR ROOM TEMPERATURE HANDLING. USE AT ELEVATED TEMPERATURES OR AEROSOL/SPRAY APPLICATIONS MAY REQUIRE ADDED PRECAUTIONS. FOR FURTHER INFORMATION REGARDING AEROSOL INHALATION TOXICITY, PLEASE REFER TO THE GUIDANCE DOCUMENT REGARDING THE USE OF SILICONE-BASED MATERIALS IN AEROSOL APPLICATIONS THAT HAS BEEN DEVELOPED BY THE SILICONE INDUSTRY (WWW.SEHSC.COM).

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: PASTE

SPECIFIC GRAVITY: 1.04

COLOR/APPEARANCE: BLUE

ODOR: SLIGHT MEDICINAL

pH: NOT APPLICABLE

BOILING/COND. POINT: NOT APPLICABLE

MELTING/FREEZING POINT: NOT DETERMINED

SOLUBILITY: NONE IN WATER

VOC %: 30 G/L

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B A R N E S D I S T R I B U T I O N

PERCENT VOLATILE: NOT APPLICABLE

VISCOSITY: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

NOTE:

THE ABOVE INFORMATION IS NOT INTENDED FOR USE IN PREPARING PRODUCT SPECIFICATIONS. CONTACT ACCUMETRIC LLC BEFORE WRITING SPECIFICATIONS.

-----10. STABILITY AND REACTIVITY -----

CHEMICAL STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID:

EXPOSURE TO AIR OR MOISTURE UNTIL READY TO USE; RELEASES ABOUT 4% METHYLETHYLKETOXIME (MEKO).

-----11. TOXICOLOGICAL INFORMATION -----

PRODUCT TOXICITY INFORMATION:

ACUTE ORAL LD50: >10,000 MG/KG

ACUTE DERMAL LD50: NONE FOUND

ACUTE INHALATION LC50: NONE FOUND

AMES TEST: UNKNOWN

EPA HAZARD CLASS: EYE IRRITANT

CPSC CLASSIFICATION: EYE IRRITANT

-----12. ECOLOGICAL INFORMATION -----

ENVIRONMENTAL FATE AND DISTRIBUTION:

COMPLETE INFORMATION IS NOT YET AVAILABLE.

ENVIRONMENTAL EFFECTS: COMPLETE INFORMATION IS NOT YET AVAILABLE.

FATE AND EFFECTS IN WASTE WATER TREATMENT PLANTS:

COMPLETE INFORMATION IS NOT YET AVAILABLE.

-----13. DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:

WE MAKE NO GUARANTEE OR WARRANTY OF ANY KIND THAT THE USE OR DISPOSAL OF THIS

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BARNES DISTRIBUTION

PRODUCT COMPLIES WITH ALL LOCAL, STATE, OR FEDERAL LAWS. IT IS ALSO THE OBLIGATION OF EACH USER OF THE PRODUCT MENTIONED HEREIN TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE STATUTES.

THIS PRODUCT IS NOT KNOWN TO BE REGULATED UNDER RCRA REGULATIONS. DISPOSAL OF UNUSED PORTIONS OF THIS PRODUCT AND PROCESS WASTE CONTAINING THIS PRODUCT SHOULD BE DONE ONLY AFTER A CAREFUL EVALUATION AND IN COMPLIANCE WITH ALL FEDERAL, LOCAL AND STATE LAWS.

-----14. TRANSPORTATION INFORMATION -----

DOT ROAD SHIPMENT INFORMATION: NOT SUBJECT TO DOT.

OCEAN SHIPMENT (IMDG): NOT SUBJECT TO IMDG CODE.

AIR SHIPMENT (IATA): NOT SUBJECT TO IATA REGULATIONS.

-----15. REGULATORY INFORMATION -----

THE CONTENTS OF THIS MSDS COMPLY WITH THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200.

TSCA STATUS:

ALL CHEMICAL SUBSTANCES FOUND IN THIS PRODUCT COMPLY WITH THE TOXIC SUBSTANCES CONTROL ACT INVENTORY REPORTING REQUIREMENTS.

CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED BY THE STATE OF CALIFORNIA UNDER THE SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (PROPOSITION 65) AS BEING KNOWN TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: NONE KNOWN

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: NONE

SARA TITLE III SECTION 304 CERCLA HAZARDOUS SUBSTANCES: NONE

SARA TITLE III SECTION 313 TOXIC CHEMICALS:

NONE PRESENT OR NONE PRESENT IN REGULATED QUANTITIES.

-----16. OTHER INFORMATION -----

DISCLAIMER:

THE DATA CONTAINED HEREIN IS BASED UPON INFORMATION THAT ACCUMETRIC LLC BELIEVES TO BE RELIABLE. USERS OF THIS PRODUCT HAVE THE RESPONSIBILITY TO DETERMINE THAT SUITABILITY OF USE AND TO ADOPT ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY AND PROTECTION OF PROPERTY AND PERSONS INVOLVED IN SAID USE. ALL STATEMENTS TO SUGGESTIONS ARE MADE WITHOUT WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THE INFORMATION, THE HAZARDS CONNECTED WITH THE USE OF THE MATERIAL OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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BARNES DISTRIBUTION

ORDER NO: 5031469 RELEASE NO: 001 MSDS NO: 004959

BARNES DISTRIBUTION

Synonyms: BD1490 BD1490-1
PRINT REV. DATE: 03/08/2010

MSDS DOCUMENT

PRODUCT PRIVATE LABEL: BARNES L/V CLEAR RTV SILICONE

-----1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

TRADE NAME OF THIS PRODUCT PRIVATE LABEL: BARNES L/V CLEAR RTV SILICONE

MSDS ID: BD1490

MANUFACTURER:
DYNATEX INC.
350 RING ROAD
ELIZABETHTOWN, KY 42701

PHONE NUMBER: (270) 769-3385

EMERGENCY PHONE:
CHEMTREC: (800) 424-9300

REVISION DATE: 3/8/2010

NFPA:
HEALTH 2
FIRE 1
REACTIVITY 0
SPECIFIC

-----2. COMPOSITION AND INFORMATION ON INGREDIENTS -----

INGREDIENT	CAS NUMBER	WEIGHT %	ACGIH TLV	PEL	STEL
AMORPHOUS SILICA	7631-86-9	11%	10 MG/M3	6 MG/M3	NOT EST.
METHYL OXIMINO SILANE	22984-54-9	6%			
DI (ETHYLMETHYLKETOXIME) METHOXYMETHYL SILANE	83817-72-5	2%			
N-BETA-(AMINOETHYL)-GA MMA-AMINOPROPYLTRIMET HOXYSILANE	1760-24-3	2%			
ANTIMONY CHROMIUM MANGANESE TITANIUM BROWN RUTILE	69991-68-0	0.2%			

-----3. HAZARD IDENTIFICATION -----

BARNES DISTRIBUTION

EYE CONTACT:

DIRECT EYE CONTACT IRRITATES SLIGHTLY WITH REDNESS AND SWELLING.

INHALATION:

VAPOR OVEREXPOSURE MAY CAUSE DROWSINESS, INJURE BLOOD, LIVER AND MAY IRRITATE EYES, NOSE, AND THROAT.

INGESTION:

SMALL AMOUNTS TRANSFERRED TO THE MOUTH BY FINGERS DURING USE, ETC., SHOULD NOT INJURE. SWALLOWING LARGE AMOUNTS MAY INJURE SLIGHTLY.

SKIN CONTACT:

A SINGLE SHORT TERM EXPOSURE (LESS THAN 24 HOURS) MAY IRRITATE. REPEATED PROLONGED CONTACT (24 TO 48 HOURS) MAY IRRITATE MODERATELY. PRODUCT CONTAINS OXIMES WHICH ARE POSSIBLE SKIN SENSITIZERS.

SYMPTOMS OF OVEREXPOSURE: NO KNOWN APPLICABLE INFORMATION.

EXISTING CONDITIONS AGGRAVATED BY EXPOSURE: NO KNOWN APPLICABLE INFORMATION.

COMMENT:

METHYL ETHYL KETOXIME (MEKO) IS FORMED UPON CONTACT WITH WATER OR HUMID AIR. MALE RODENTS EXPOSED TO MEKO VAPOR THROUGHOUT THEIR LIFETIME DEVELOPED LIVER TUMORS. SINCE MANY COMMONLY USED CHEMICALS CAUSE LIVER TUMORS IN RATS AND MICE, ADDITIONAL TESTING IS PLANNED BY THE MEKO SUPPLIER TO DETERMINE ANY RELEVANCE TO HUMANS. UNTIL MORE DATA IS KNOWN, EXPOSURE LEVELS SHOULD BE MAINTAINED AS LOW AS POSSIBLE.

-----4. FIRST AID INFORMATION -----

EYE CONTACT:

IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. SEEK MEDICAL ATTENTION.

SKIN CONTACT

REMOVE FROM SKIN AND WASH THOROUGHLY WITH SOAP AND WATER OR WATERLESS CLEANSER. GET MEDICAL ATTENTION IF IRRITATION OR OTHER ILL EFFECTS DEVELOP OR PERSIST.

INHALATION: REMOVE TO FRESH AIR. NO FIRST AID SHOULD BE NEEDED.

INGESTION: NO FIRST AID SHOULD BE NEEDED.

COMMENTS: TREAT ACCORDING TO PERSON'S CONDITION AND SPECIFICS OF EXPOSURE.

-----5. FIRE FIGHTING MEASURES -----

FLASH POINT: NOT APPLICABLE

AUTO-IGNITION TEMPERATURE: NOT DETERMINED

BARNES DISTRIBUTION

FLAMMABILITY LIMITS IN AIR: NOT DETERMINED

EXTINGUISHING MEDIA:

ON LARGE FIRES USE DRY CHEMICAL, FOAM, OR WATER SPRAY. ON SMALL FIRES USE CARBON DIOXIDE, DRY CHEMICAL OR WATER SPRAY. WATER CAN BE USED TO COOL FIRE EXPOSED CONTAINERS.

SPECIAL FIRE FIGHTING PROCEDURES:

SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN WHEN FIGHTING LARGE FIRES INVOLVING CHEMICALS. DETERMINE THE NEED TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. USE WATER SPRAY TO KEEP FIRE EXPOSED CONTAINERS COOL.

UNUSUAL FIRE OR EXPLOSION HAZARDS: NONE KNOWN

-----6. ACCIDENTAL RELEASE MEASURES -----

STEPS TO BE TAKEN IN CASE OF SPILL OR RELEASE:

DETERMINE WHETHER TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. OBSERVE ALL PERSONAL PROTECTION EQUIPMENT RECOMMENDATIONS DESCRIBED IN SECTIONS 5 AND 8.

FOR LARGE SPILLS, PROVIDE DIKING OR OTHER APPROPRIATE CONTAINMENT TO KEEP MATERIAL FROM SPREADING. IF DIKED MATERIAL CAN BE PUMPED, STORE RECOVERED MATERIAL IN APPROPRIATE CONTAINER.

FOR SMALL SPILLS, WIPE UP OR SCRAPE UP AND CONTAIN FOR SALVAGE OR DISPOSAL. CLEAN AREA AS APPROPRIATE SINCE SPILLED MATERIAL, EVEN IN SMALL QUANTITIES, MAY PRESENT A SLIP HAZARD. FINAL CLEANING MAY REQUIRE THE USE OF STEAM, SOLVENTS OR DETERGENTS. DISPOSE OF SATURATED ABSORBENT OR CLEANING MATERIALS APPROPRIATELY, SINCE SPONTANEOUS HEATING MAY OCCUR.

LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS MAY APPLY TO RELEASES AND DISPOSAL OF THIS MATERIAL, AS WELL AS THOSE MATERIALS AND ITEMS EMPLOYED IN THE CLEANUP OF RELEASES. YOU WILL NEED TO DETERMINE WHICH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS ARE APPLICABLE.

SECTIONS 13 AND 15 OF THIS MSDS PROVIDE INFORMATION REGARDING CERTAIN FEDERAL AND STATE REQUIREMENTS.

-----7. HANDLING AND STORAGE -----

HANDLING:

AVOID EYE CONTACT. AVOID SKIN CONTACT. AVOID BREATHING VAPOR. KEEP CONTAINER CLOSED. DO NOT TAKE INTERNALLY. USE REASONABLE CARE.

STORAGE:

KEEP CONTAINER CLOSED AND STORE IN A COOL, WELL VENTILATED AREA, AWAY FROM WATER OR MOISTURE.

OTHER PRECAUTIONS:

PRODUCT EVOLVES METHYL ETHYL KETOXIME (MEKO) WHEN EXPOSED TO WATER OR HUMID AIR, PROVIDE VENTILATION DURING USE TO CONTROL MEKO WITHIN THE EXPOSURE

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BARNES DISTRIBUTION
GUIDELINES OR USE RESPIRATORY PROTECTION.

-----8. EXPOSURE CONTROLS AND PERSONAL PROTECTION -----

EYE PROTECTION: SAFETY GOGGLES OR GLASSES WITH SIDE SHIELDS ARE RECOMMENDED.

SKIN PROTECTION:

WASH AT MEALTIMES AND END OF SHIFT. CONTAMINATED CLOTHING AND SHOES SHOULD BE REMOVED AS SOON AS PRACTICAL AND THOROUGHLY CLEANED BEFORE REUSE.
CHEMICAL PROTECTIVE GLOVES ARE RECOMMENDED.

SUITABLE GLOVES: SILVER SHIELD(R*) 4H(R*)

RESPIRATORY PROTECTION:

NO RESPIRATORY PROTECTION SHOULD BE NEEDED WITH GOOD LOCAL VENTILATION.

PRECAUTIONARY MEASURES:

AVOID EYE CONTACT. AVOID SKIN CONTACT. AVOID BREATHING VAPOR. KEEP CONTAINER CLOSED. DO NOT TAKE INTERNALLY. USE REASONABLE CARE.

COMMENT:

PRODUCT EVOLVES METHYL ETHYL KETOXIME (MEKO) WHEN EXPOSED TO WATER OR HUMID AIR. PROVIDE VENTILATION DURING USE TO CONTROL METHYL ETHYL KETOXIME WITHIN THE EXPOSURE GUIDELINES OR USE RESPIRATORY PROTECTION.

NOTE:

THESE PRECAUTIONS ARE FOR ROOM TEMPERATURE HANDLING. USE AT ELEVATED TEMPERATURES OR AEROSOL/SPRAY APPLICATIONS MAY REQUIRE ADDED PRECAUTIONS. FOR FURTHER INFORMATION REGARDING AEROSOL INHALATION TOXICITY, PLEASE REFER TO THE GUIDANCE DOCUMENT REGARDING THE USE OF SILICONE-BASED MATERIALS IN AEROSOL APPLICATIONS THAT HAS BEEN DEVELOPED BY THE SILICONE INDUSTRY (WWW.SEHSC.COM).

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: PASTE

SPECIFIC GRAVITY: 1.04

COLOR/APPEARANCE: CLEAR

ODOR: SLIGHT MEDICINAL

pH: NOT APPLICABLE

BOILING/COND. POINT: NOT APPLICABLE

MELTING/FREEZING POINT: NOT DETERMINED

SOLUBILITY: NONE IN WATER

BARNES DISTRIBUTION

VOC %: 30 G/L

PERCENT VOLATILE: NOT APPLICABLE

VISCOSITY: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

NOTE:

THE ABOVE INFORMATION IS NOT INTENDED FOR USE IN PREPARING PRODUCT SPECIFICATIONS. CONTACT ACCUMETRIC LLC BEFORE WRITING SPECIFICATIONS.

-----10. STABILITY AND REACTIVITY -----

CHEMICAL STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID:

EXPOSURE TO AIR OR MOISTURE UNTIL READY TO USE; RELEASES ABOUT 4% METHYLETHYLKETOXIME (MEKO).

-----11. TOXICOLOGICAL INFORMATION -----

PRODUCT TOXICITY INFORMATION:

ACUTE ORAL LD50: >10,000 MG/KG

ACUTE DERMAL LD50: NONE FOUND

ACUTE INHALATION LC50: NONE FOUND

AMES TEST: UNKNOWN

EPA HAZARD CLASS: EYE IRRITANT

CPSC CLASSIFICATION: EYE IRRITANT

-----12. ECOLOGICAL INFORMATION -----

ENVIRONMENTAL FATE AND DISTRIBUTION:

COMPLETE INFORMATION IS NOT YET AVAILABLE.

ENVIRONMENTAL EFFECTS: COMPLETE INFORMATION IS NOT YET AVAILABLE.

FATE AND EFFECTS IN WASTE WATER TREATMENT PLANTS:

COMPLETE INFORMATION IS NOT YET AVAILABLE.

-----13. DISPOSAL CONSIDERATIONS -----

BARNES DISTRIBUTION

WASTE DISPOSAL METHOD:

WE MAKE NO GUARANTEE OR WARRANTY OF ANY KIND THAT THE USE OR DISPOSAL OF THIS PRODUCT COMPLIES WITH ALL LOCAL, STATE, OR FEDERAL LAWS. IT IS ALSO THE OBLIGATION OF EACH USER OF THE PRODUCT MENTIONED HEREIN TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE STATUTES.

THIS PRODUCT IS NOT KNOWN TO BE REGULATED UNDER RCRA REGULATIONS. DISPOSAL OF UNUSED PORTIONS OF THIS PRODUCT AND PROCESS WASTE CONTAINING THIS PRODUCT SHOULD BE DONE ONLY AFTER A CAREFUL EVALUATION AND IN COMPLIANCE WITH ALL FEDERAL, LOCAL AND STATE LAWS.

-----14. TRANSPORTATION INFORMATION -----

DOT ROAD SHIPMENT INFORMATION: NOT SUBJECT TO DOT.

OCEAN SHIPMENT (IMDG): NOT SUBJECT TO IMDG CODE.

AIR SHIPMENT (IATA): NOT SUBJECT TO IATA REGULATIONS.

-----15. REGULATORY INFORMATION -----

THE CONTENTS OF THIS MSDS COMPLY WITH THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200.

TSCA STATUS:

ALL CHEMICAL SUBSTANCES IN THIS MATERIAL ARE INCLUDED ON OR EXEMPTED FROM LISTING ON THE TSCA INVENTORY OF CHEMICAL SUBSTANCES.

CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED BY THE STATE OF CALIFORNIA UNDER THE SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (PROPOSITION 65) AS BEING KNOWN TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: NONE KNOWN

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: NONE

SARA TITLE III SECTION 304 CERCLA HAZARDOUS SUBSTANCES: NONE

SARA TITLE III SECTION 313 TOXIC CHEMICALS:

NONE PRESENT OR NONE PRESENT IN REGULATED QUANTITIES.

-----16. OTHER INFORMATION -----

DISCLAIMER:

THE DATA CONTAINED HEREIN IS BASED UPON INFORMATION THAT ACCUMETRIC LLC BELIEVES TO BE RELIABLE. USERS OF THIS PRODUCT HAVE THE RESPONSIBILITY TO DETERMINE THAT SUITABILITY OF USE AND TO ADOPT ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY AND PROTECTION OF PROPERTY AND PERSONS INVOLVED IN SAID USE. ALL STATEMENTS TO SUGGESTIONS ARE MADE WITHOUT WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THE INFORMATION, THE HAZARDS CONNECTED

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BARNES DISTRIBUTION
WITH THE USE OF THE MATERIAL OR THE RESULTS TO BE OBTAINED FROM THE USE
THEREOF.

CHM-D

ORDER NO: 2306480 RELEASE NO: 001 MSDS NO: 005034

BARNES DISTRIBUTION

Synonyms: 21434
LOCTITE(R*)

MATERIAL SAFETY DATA SHEET

HENKEL TECHNOLOGIES

REVISION DATE: 03/24/2010

ISSUE DATE: 03/24/2010

-----1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: LOCTITE(R) SILICONE LUBRICANT

PRODUCT TYPE: LUBRICANT

ITEM NO.: 51360

REGION: UNITED STATES

COMPANY ADDRESS:
HENKEL CORPORATION
1001 TROUT BROOK CROSSING
ROCKY HILL, CONNECTICUT 06067

CONTACT INFORMATION:
TELEPHONE: 860.571.5100
EMERGENCY TELEPHONE: 860.571.5100
INTERNET: WWW.LOCTITE.COM

-----2. COMPOSITION/INFORMATION ON INGREDIENTS -----

NON HAZARDOUS COMPONENTS: ALL COMPONENTS OF THIS PRODUCT ARE NON-HAZARDOUS

-----3. HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:

PHYSICAL STATE: LIQUID

COLOR: OPAQUE

ODOR: NONE

HMS:
HEALTH 0
FLAMMABILITY 1
PHYSICAL HAZARD 1
PERSONAL PROTECTION SEE SECTION 8

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B A R N E S D I S T R I B U T I O N

IMPORTANT: NOT EXPECTED TO PRESENT ANY UNUSUAL HAZARDS IN NORMAL USE.

RELEVANT ROUTES OF EXPOSURE: EYE CONTACT

POTENTIAL HEALTH EFFECTS:

INHALATION: NOT A HAZARD UNDER NORMAL CONDITIONS OF USE.

SKIN CONTACT: NOT EXPECTED TO BE A HAZARD.

EYE CONTACT: DIRECT CONTACT MAY CAUSE TEMPORARY REDNESS AND DISCOMFORT

INGESTION: NOT EXPECTED TO BE HARMFUL BY INGESTION.

EXISTING CONDITIONS AGGRAVATED BY EXPOSURE: NONE KNOWN

SEE SECTION 11 FOR ADDITIONAL TOXICOLOGICAL INFORMATION.

-----4. FIRST AID MEASURES -----

INHALATION:

NO SPECIFIC TREATMENT IS NECESSARY SINCE MATERIAL IS NOT LIKELY TO BE HAZARDOUS BY INHALATION.

SKIN CONTACT: WASH WITH SOAP AND WATER.

EYE CONTACT:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.

INGESTION: NO FIRST AID SHOULD BE NEEDED

NOTES TO PHYSICIAN: NONE.

-----5. FIRE-FIGHTING MEASURES -----

FLASH POINT: GREATER THAN 93 DEG. C (200 DEG. F) TAGLIABUE CLOSED CUP

AUTOIGNITION TEMPERATURE: NOT AVAILABLE

FLAMMABLE/EXPLOSIVE LIMITS-LOWER %: NOT AVAILABLE

FLAMMABLE/EXPLOSIVE LIMITS-UPPER %: NOT AVAILABLE

EXTINGUISHING MEDIA: USE DRY CHEMICAL, CO2, WATER SPRAY OR 'ALCOHOL' FOAM.

SPECIAL FIRE FIGHTING PROCEDURES:

FIRE FIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA).

UNUSUAL FIRE OR EXPLOSION HAZARDS: NONE

HAZARDOUS COMBUSTION PRODUCTS:

OXIDES OF CARBON. FORMALDEHYDE. OXIDES OF SILICON.

BARNES DISTRIBUTION

-----6. ACCIDENTAL RELEASE MEASURES -----

ENVIRONMENTAL PRECAUTIONS:

DO NOT ALLOW MATERIAL TO CONTAMINATE GROUND WATER SYSTEM. CONTAIN SPILL.

CLEAN-UP METHODS:

SOAK UP WITH INERT ABSORBENT. STORE IN A CLOSED CONTAINER UNTIL READY FOR DISPOSAL. CONTAMINATED SURFACES WILL BE EXTREMELY SLIPPERY. FINAL CLEANING MAY REQUIRE USE OF STEAM, SOLVENTS OR DETERGENTS.

-----7. HANDLING AND STORAGE -----

HANDLING: USE ONLY WITH ADEQUATE VENTILATION. AVOID EYE CONTACT.

STORAGE: STORE IN ORIGINAL CONTAINER UNTIL READY TO USE.

INCOMPATIBLE PRODUCTS: OXIDIZING AGENTS.

FOR INFORMATION ON PRODUCT SHELF LIFE CONTACT HENKEL CUSTOMER SERVICE AT (800) 243-4874.

-----8. EXPOSURE CONTROLS / PERSONAL PROTECTION -----

ENGINEERING CONTROLS: GENERAL ROOM VENTILATION IS USUALLY ADEQUATE.

RESPIRATORY PROTECTION:

NO PERSONAL RESPIRATORY PROTECTIVE EQUIPMENT NORMALLY REQUIRED.

SKIN PROTECTION: WASHING AT MEALTIME AND AT END OF SHIFT IS ADEQUATE

EYE/FACE PROTECTION: SAFETY GLASSES WITH SIDE-SHIELDS.

SEE SECTION 2 FOR EXPOSURE LIMITS.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: LIQUID

COLOR: OPAQUE

ODOR: NONE

VAPOR PRESSURE: LESS THAN 5 MM Hg AT 26.6 DEG. C (80 DEG. F)

pH: NOT APPLICABLE

BOILING POINT/RANGE: NOT AVAILABLE

MELTING POINT/RANGE: NOT AVAILABLE

SPECIFIC GRAVITY: 0.95

BARNES DISTRIBUTION

VAPOR DENSITY: NOT AVAILABLE

EVAPORATION RATE: NOT AVAILABLE

SOLUBILITY IN WATER: INSOLUBLE.

PARTITION COEFFICIENT (n-OCTANOL/WATER): NOT AVAILABLE

VOC CONTENT: ESSENTIALLY ZERO

-----10. STABILITY AND REACTIVITY -----

STABILITY: STABLE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION PRODUCTS: NONE UNDER NORMAL USE.

INCOMPATIBILITY: OXIDIZING AGENTS.

CONDITIONS TO AVOID: NONE KNOWN.

-----11. TOXICOLOGICAL INFORMATION -----

PRODUCT TOXICITY DATA:

NO EXPERIMENTAL TOXICOLOGICAL DATA ON THE PREPARATION AS SUCH IS AVAILABLE.

CARCINOGEN STATUS:

LITERATURE REFERENCED TARGET ORGAN & OTHER HEALTH EFFECTS:

-----12. ECOLOGICAL INFORMATION -----

ECOLOGICAL INFORMATION: NOT AVAILABLE

-----13. DISPOSAL CONSIDERATIONS -----

INFORMATION PROVIDED IS FOR UNUSED PRODUCT ONLY.

RECOMMENDED METHOD OF DISPOSAL:

DISPOSE OF ACCORDING TO FEDERAL, STATE AND LOCAL GOVERNMENTAL REGULATIONS.

EPA HAZARDOUS WASTE NUMBER: NOT A RCRA HAZARDOUS WASTE.

-----14. TRANSPORT INFORMATION -----

U.S. DEPARTMENT OF TRANSPORTATION GROUND (49 CFR):

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BARNES DISTRIBUTION

PROPER SHIPPING NAME: UNRESTRICTED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE

INTERNATIONAL AIR TRANSPORTATION (ICAO/IATA):
PROPER SHIPPING NAME: UNRESTRICTED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE

WATER TRANSPORTATION (IMO/IMDG):
PROPER SHIPPING NAME: UNRESTRICTED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE
MARINO POLLUTANT: NONE

-----15. REGULATORY INFORMATION -----

UNITED STATES REGULATORY INFORMATION:

TSCA 8 (B) INVENTORY STATUS:
ALL COMPONENTS ARE LISTED OR ARE EXEMPT FROM LISTING ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY.

TSCA 12 (B) EXPORT NOTIFICATION: NONE.

CERCLA/SARA SECTION 302 EHS: NONE.

CERCLA/SARA SECTION 311/312: NONE.

CERCLA/SARA 313: NONE.

CALIFORNIA PROPOSITION 65:
NO CALIFORNIA PROPOSITION 65 LISTED CHEMICALS ARE KNOWN TO BE PRESENT.

CANADA REGULATORY INFORMATION:

CEPA DSL/NDSL STATUS:
ALL COMPONENTS ARE LISTED ON OR ARE EXEMPT FROM LISTING ON THE DOMESTIC SUBSTANCES LIST.

WHMIS HAZARD CLASS: NON-CONTROLLED

-----16. OTHER INFORMATION -----

THIS MATERIAL SAFETY DATA SHEET CONTAINS CHANGES FROM THE PREVIOUS VERSION IN SECTIONS: UPDATED REVISION DATE ONLY

PREPARED BY: C.J. MICHAELS, MANAGER, REGULATORY AFFAIRS

ORDER NO: 2306480 RELEASE NO: 001 MSDS NO: 005034

B A R N E S D I S T R I B U T I O N

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ORDER NO: 1644828 RELEASE NO: 001 MSDS NO: 005212

B A R N E S D I S T R I B U T I O N

Synonyms: BD3212 BD3213 BD3214 BD3215 BD3216 BD3217 BD3218 BD3219 BD3220 BD3221 BD3222
BD3223 BD3224 BD3225 BD3226 BD3227 BD3228 BD3229 BD3230 BD3231 BD3232 BD3233
BD3234 BD3235 BD3236 BD3235 BD3256 BD3266 BD3267 BD3268 BD3281 BD3282 BD3283
BD3284

MATERIAL SAFETY DATA SHEET

ABRASIVE SOLUTIONS GROUP.

AN EVEN CUT COMPANY

NFPA:
HEALTH RATING 1
FLAMMABILITY RATING 0
REACTIVITY RATING 0
HAZARD RATING 0

-----SECTION I - NAME AND PRODUCT -----

MANUFACTURER
ABRASIVE SOLUTIONS GROUP.

ADDRESS (CITY, STATE AND ZIP):
850 EAST 72ND ST.
CLEVELAND, OH 44103

CONTACT: TECHNICAL DEPARTMENT

TELEPHONE: (800) 322-4321

TRADE NAME, COMMON NAME, OR SPECIFICATION: FLAP WHEELS, A/O

CHEMICAL FAMILY OR PRODUCT TYPE: ABRASIVE PRODUCT, FLAP WHEELS, A/O

DATE: FEB. 1, 2009

-----SECTION II - COMPOSITION -----

CHEMICAL NAME	%	COMMON NAME	REG* (Y/N)	CAS #
ALUMINUM OXIDE A1203	23-33	ALPHA ALUMINA (ABRASIVE GRAIN)	Y	1344-28-1
DUROPLASTIC PHENOL OR UREA RESIN BINDER, & INERT BACKING	63-73	INERT OR NUISANCE DUST	Y	N/A
CURED EPOXY ADHESIVE	5-10	GLUE	N	N/A

CHEMICAL NAME	OSHA PERMISSIVE	ACGIH	CARCINOGEN
---------------	-----------------	-------	------------

	B A R N E S EXPOSURE LIMIT	D I S T R I B U T I O N TLV	(Y/N)
ALUMINUM OXIDE A1203	15 MG/M3 (TOTAL DUST)	5 MG/M3 (TOTAL DUST)	N
DUROPLASTIC PHENOL OR UREA RESIN BINDER, & INERT BACKING	15 MG/M3 (TOTAL DUST)	5 MG/M3 (TOTAL DUST)	N
CURED EPOXY ADHESIVE	N/A	N/A	N

*MAXIMUMS ARE REQUIRED BY OSHA 29 CFR 1910.1200 HAZARD COMMUNICATION STANDARD.

**PLEASE NOTE THAT STEEL, ALUMINUM, AND/OR DIE CAST HARDWARE MAY BE INCORPORATED IN THIS PRODUCT. THESE PORTIONS IN NO WAY REPRESENT A HAZARD WHEN HANDLED IN ACCORDANCE WITH THE MEASURES BELOW.

-----SECTION III - PHYSICAL AND CHEMICAL DATA -----

BOILING POINT: N/A

MELTING POINT: N/A

SPECIFIC GRAVITY: N/A

VAPOR PRESSURE: N/A

% VOLATILE BY VOL.: N/A

VAPOR DENSITY: N/A

EVAPORATION RATE: N/A

SOLUBILITY IN WATER: N/A

SOLUBILITY IN ALCOHOL: N/A

SOLUBILITY IN OTHER SOLVENTS: N/A

APPEARANCE AND ODOR: A WHEEL OF RADially MOUNTED ABRASIVE FLAPS

-----SECTION IV - FIRE AND EXPLOSION HAZARD -----

FLASH POINT: N/A

METHOD USED: N/A

FLAMMABLE LIMITS: N/A

EXTINGUISHING MEDIA: WATER, CARBON DIOXIDE, FOAM, DRY CHEMICAL

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SPECIAL FIRE FIGHTING PROCEDURE:

FIBER AND RESIN BINDER WILL BURN OR DECOMPOSE; USE RESPIRATORY PROTECTION.

EXPLOSION POTENTIAL: N/A

-----SECTION V - HEALTH, FIRST AID AND MEDICAL DATA -----

PRIMARY ROUTES OF ENTRY	ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE	FIRST AID AND MEDICAL TREATMENT
INHALATION: AIRBORNE DUST DURING GRINDING	ACUTE: MAY CAUSE COUGHING, SHORTNESS OF BREATH CHRONIC: MAY EFFECT BREATHING CAPACITY	REMOVE TO FRESH AIR; OBTAIN FIRST AID OR MEDICAL ASSISTANCE AS NEEDED
INGESTION: DUST DURING GRINDING	DUST: NO KNOWN ADVERSE EFFECTS, INGESTION NOT RECOMMENDED	FIRST AID OR MEDICAL ASSISTANCE AS NEEDED
SKIN: DURING GRINDING	NOT ABSORBED THROUGH SKIN - MAY CAUSE ABRASION IN USE	FIRST AID OR MEDICAL ASSISTANCE AS NEEDED
EYE: AIRBORNE DUST DURING GRINDING	DUST MAY IRRITATE EYES	WASH WITH WATER; FIRST AID OR MEDICAL ASSISTANCE AS NEEDED
OTHER HEALTH RISKS: DURING GRINDING	ON SOME MATERIALS, ELEVATED SOUND LEVELS MAY BE CREATED WHICH MAY EFFECT HEARING	OBTAIN MEDICAL ASSISTANCE AS NEEDED

-----SECTION VI - CORROSIVITY AND REACTIVITY DATA -----

STABILITY:
UNSTABLE ()
STABLE (X)

POLYMERIZATION:
MAY OCCUR ()
WILL NOT OCCUR (X)

INCOMPATIBILITY (MATERIALS TO AVOID): N/A

DECOMPOSITION PRODUCTS:

ORDER NO: 1644828 RELEASE NO: 001 MSDS NO: 005212

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IN USE, DUST AND DECOMPOSING RESIN FUMES ARE GENERATED. IN MOST CASES, THE MATERIAL REMOVED FROM WORK PIECE WILL BE SIGNIFICANTLY GREATER THAN THE COATED ABRASIVE PRODUCT.

CONDITIONS TO BE AVOIDED: N/A

-----SECTION VII - STORAGE, HANDLING AND USE PROCEDURES -----

NORMAL STORAGE AND HANDLING:

HANDLE WITH ADEQUATE VENTILATION; SEE OSHA 29 CFR 1910.94 (VENTILATION) AND OSHA 29 CFR 1910.1000 (AIR CONTAMINANTS)

NORMAL USE:

HANDLE WITH ADEQUATE VENTILATION; SEE OSHA 29 CFR 1910.94 (VENTILATION) AND OSHA 29 CFR 1910.1000 (AIR CONTAMINANTS), OSHA CFR 1910.213 (P) SANDING MACHINES & OSHA CFR 1910.243

TRANSPORTATION:

THERE ARE NO CHEMICALS INCLUDED IN THE FINAL PRODUCT THAT APPEAR AS A "HAZARDOUS MATERIAL" AS INDICATED IN THE DEPARTMENT OF TRANSPORTATION'S DOCUMENT 49 CFR DOC 172.101 APP. A.

WASTE DISPOSAL METHOD:

STANDARD LANDFILL METHODS CONSISTENT WITH FEDERAL, STATE AND LOCAL LAWS

-----SECTION VIII - PERSONAL PROTECTION INFORMATION -----

RESPIRATORY PROTECTION (SPECIFY TYPE):

AS NEEDED, APPROVED DUST RESPIRATOR OSHA 24 CFR 1910.134

VENTILATION:

- () LOCAL: RECOMMENDED
- (X) MECHANICAL: RECOMMENDED
- () (GENERAL):
- () OTHER: NAIF

PROTECTIVE GLOVES: RECOMMENDED WHEN IN USE

EYE PROTECTION: RECOMMENDED OSHA 29 CFR 1910.133 (FACE AND EYE PROTECTION)

OTHER EQUIPMENT:

AS NEEDED, HEARING PROTECTION OSHA 29 CFR 1910.215 (HEARING PROTECTION)

SEE SECTIONS VI, VII AND VIII

MEASURES TO BE TAKEN DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT

-----SECTION IX - SPECIAL PRECAUTIONS -----

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

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BARNES DISTRIBUTION

SLIGHT FORMALDEHYDE OR PHENOLIC RESIN ODOR FROM BINDING SYSTEM MAY BE
RELEASED DURING STORAGE

OTHER PRECAUTIONS: N/A

N/A = NOT APPLICABLE

NAIF = NO APPLICABLE INFORMATION FOUND

FOR COMPANY USE:

THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE TAKEN FROM SOURCES
BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, HOWEVER, ABRASIVE SOLUTIONS
GROUP, MAKES NO WARRANTY WITH RESPECT TO THE ACCURACY OF THE INFORMATION OR
THE SUITABILITY OF THE RECOMMENDATIONS, AND ASSUMES NO LIABILITY TO ANY USER
THEREOF.

ORDER NO: 0466333 RELEASE NO: 001 MSDS NO: 005338

BARNES DISTRIBUTION

Synonyms: KP76679 KP76680 KP76681 KP76682 KP76685 KP76687 07524 07525 07526 07527
07528 07529

MATERIAL SAFETY DATA SHEET

3M(TM) BRISTLE DISC, 3M(TM) RADIAL BRISTLE DISC, SCOTCH-BRITE(TM) BRISTLE DISC, SCOTCH-BRITE(TM) RADIAL BRISTLE DISC, SCOTCH-BRITE(TM) RADIAL BRISTLE BRUSH, SCOTCH-BRITE(TM) ROLOC(TM) BODY MAN'S BRISTLE DISC, ALUMINUM OXIDE/CUBITRON(TM) BLEND

12/17/2007

3M

MATERIAL SAFETY DATA SHEET

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(2) NEITHER THE COPY NOR THE ORIGINAL IS RESOLD OR OTHERWISE DISTRIBUTED WITH THE INTENTION OF EARNING A PROFIT THEREON.

-----SECTION 1: PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME:

3M(TM) BRISTLE DISC, 3M(TM) RADIAL BRISTLE DISC, SCOTCH-BRITE(TM) BRISTLE DISC, SCOTCH-BRITE(TM) RADIAL BRISTLE DISC, SCOTCH-BRITE(TM) RADIAL BRISTLE BRUSH, SCOTCH-BRITE(TM) ROLOC(TM) BODY MAN'S BRISTLE DISC, ALUMINUM OXIDE/CUBITRON(TM) BLEND

MANUFACTURER: 3M

DIVISION: ABRASIVES SYSTEMS DIVISION

ADDRESS:

3M CENTER
ST. PAUL, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 OR (651) 737-6501 (24 HOURS)

ISSUE DATE: 12/17/2007

SUPERCEDES DATE: 05/23/2007

DOCUMENT GROUP: 19-1098-3

PRODUCT USE:

INTENDED USE: ABRASIVE PRODUCT

BARNES DISTRIBUTION

-----SECTION 2: INGREDIENTS -----

INGREDIENT	C.A.S. NO.	% BY WT
THERMOPLASTIC BINDER	UNKNOWN	35 - 80
CUBITRON(TM) MINERAL	66402-68-4	5 - 25
ALUMINUM OXIDE MINERAL	1344-28-1	5 - 25
POLYSILOXANE	UNKNOWN	1 - 20

-----SECTION 3: HAZARDS IDENTIFICATION -----

3.1 EMERGENCY OVERVIEW:

ODOR, COLOR, GRADE: ABRASIVE PRODUCT, NO ODOR.

GENERAL PHYSICAL FORM: SOLID

IMMEDIATE HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS:
THIS DOCUMENT COVERS ONLY THE 3M PRODUCT. FOR COMPLETE ASSESSMENT, WHEN DETERMINING THE DEGREE OF HAZARD, THE MATERIAL BEING ABRADED MUST ALSO BE CONSIDERED.

3.2 POTENTIAL HEALTH EFFECTS:

EYE CONTACT:

MECHANICAL EYE IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE PAIN, REDNESS, TEARING AND CORNEAL ABRASION.

DUST CREATED BY CUTTING, GRINDING, SANDING, OR MACHINING MAY CAUSE EYE IRRITATION. SIGNS/SYMPTOMS MAY INCLUDE REDNESS, SWELLING, PAIN, TEARING, AND BLURRED OR HAZY VISION.

SKIN CONTACT:

MECHANICAL SKIN IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE ABRASION, REDNESS, PAIN, AND ITCHING.

INHALATION:

DUST FROM CUTTING, GRINDING, SANDING OR MACHINING MAY CAUSE IRRITATION OF THE RESPIRATORY SYSTEM. SIGNS/SYMPTOMS MAY INCLUDE COUGH, SNEEZING, NASAL DISCHARGE, HEADACHE, HOARSENESS, AND NOSE AND THROAT PAIN.

PROLONGED OR REPEATED EXPOSURE MAY CAUSE:

PNEUMOCONIOSIS:

SIGN/SYMPTOMS MAY INCLUDE PERSISTENT COUGH, BREATHLESSNESS, CHEST PAIN, INCREASED AMOUNTS OF SPUTUM, AND CHANGES IN LUNG FUNCTION TESTS.

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INGESTION:

PHYSICAL BLOCKAGE:

SIGNS/SYMPTOMS MAY INCLUDE CRAMPING, ABDOMINAL PAIN, AND CONSTIPATION.

-----SECTION 4: FIRST AID MEASURES -----

4.1 FIRST AID PROCEDURES:

THE FOLLOWING FIRST AID RECOMMENDATIONS ARE BASED ON AN ASSUMPTION THAT APPROPRIATE PERSONAL AND INDUSTRIAL HYGIENE PRACTICES ARE FOLLOWED.

EYE CONTACT:

FLUSH EYES WITH LARGE AMOUNTS OF WATER. IF SIGNS/SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

SKIN CONTACT:

WASH AFFECTED AREA WITH SOAP AND WATER. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

INHALATION:

REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

IF SWALLOWED:

DO NOT INDUCE VOMITING UNLESS INSTRUCTED TO DO SO BY MEDICAL PERSONNEL. GIVE VICTIM TWO GLASSES OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.

-----SECTION 5: FIRE FIGHTING MEASURES -----

5.1 FLAMMABLE PROPERTIES:

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS - LEL: NOT APPLICABLE

FLAMMABLE LIMITS - UEL: NOT APPLICABLE

5.2 EXTINGUISHING MEDIA: MATERIAL WILL NOT BURN.

5.3 PROTECTION OF FIRE FIGHTERS:

SPECIAL FIRE FIGHTING PROCEDURES:

WEAR FULL PROTECTIVE EQUIPMENT (BUNKER GEAR) AND A SELF-CONTAINED BREATHING APPARATUS (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NOT APPLICABLE. NONE INHERENT IN THIS PRODUCT.

NOTE:

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SEE STABILITY AND REACTIVITY (SECTION 10) FOR HAZARDOUS COMBUSTION AND THERMAL DECOMPOSITION INFORMATION.

-----SECTION 6: ACCIDENTAL RELEASE MEASURES -----

ACCIDENTAL RELEASE MEASURES: NOT APPLICABLE.

IN THE EVENT OF A RELEASE OF THIS MATERIAL, THE USER SHOULD DETERMINE IF THE RELEASE QUALIFIES AS REPORTABLE ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS.

-----SECTION 7: HANDLING AND STORAGE -----

7.1 HANDLING:

AVOID BREATHING OF DUST CREATED BY CUTTING, SANDING, GRINDING OR MACHINING. DAMAGED PRODUCT CAN BREAK APART DURING USE AND CAUSE SERIOUS INJURY TO FACE OR EYES. CHECK PRODUCT FOR DAMAGE SUCH AS CRACKS OR NICKS PRIOR TO USE. REPLACE IF DAMAGED. ALWAYS WEAR EYE AND FACE PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS. SPARKS AND PARTICLES FLYING FROM THE PRODUCT DURING SANDING OR GRINDING CAN CAUSE INJURY AND FIRE.

7.2 STORAGE: STORE IN A COOL, DRY PLACE.

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

8.1 ENGINEERING CONTROLS:

USE WITH APPROPRIATE LOCAL EXHAUST VENTILATION. PROVIDE APPROPRIATE LOCAL EXHAUST FOR CUTTING, GRINDING, SANDING OR MACHINING. USE GENERAL DILUTION VENTILATION AND/OR LOCAL EXHAUST VENTILATION TO CONTROL AIRBORNE EXPOSURES TO BELOW OCCUPATIONAL EXPOSURE LIMITS AND/OR CONTROL DUST, FUME, OR AIRBORNE PARTICLES. IF VENTILATION IS NOT ADEQUATE, USE RESPIRATORY PROTECTION EQUIPMENT.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE):

8.2.1 EYE/FACE PROTECTION:

AVOID EYE CONTACT. TO MINIMIZE THE RISK OF INJURY TO FACE AND EYES, ALWAYS WEAR EYE AND FACE PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS.

8.2.2 SKIN PROTECTION:

AVOID SKIN CONTACT. WEAR APPROPRIATE GLOVES TO MINIMIZE RISK OF INJURY TO SKIN FROM CONTACT WITH DUST OR PHYSICAL ABRASION FROM GRINDING OR SANDING.

8.2.3 RESPIRATORY PROTECTION:

AVOID BREATHING OF DUST CREATED BY CUTTING, SANDING, GRINDING OR MACHINING. ASSESS EXPOSURE CONCENTRATIONS OF ALL MATERIALS INVOLVED IN THE WORK PROCESS. CONSIDER MATERIAL BEING ABRADED WHEN DETERMINING THE APPROPRIATE RESPIRATORY PROTECTION. SELECT AND USE APPROPRIATE RESPIRATORS TO PREVENT

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INHALATION OVEREXPOSURE.

8.2.4 PREVENTION OF SWALLOWING:

WASH HANDS AFTER HANDLING AND BEFORE EATING. NOT AN EXPECTED ROUTE OF EXPOSURE.

8.3 EXPOSURE GUIDELINES:

INGREDIENT	AUTHORITY	TYPE	LIMIT	ADDITIONAL INFORMATION
ALUMINUM OXIDE MINERAL	ACGIH	TWA, PARTICULATE MATTER, <1% CRYSTALLINE SILICA	10 MG/M3	TABLE A4
ALUMINUM OXIDE MINERAL	CMRG	TWA	1 FIBER/CC	
ALUMINUM OXIDE MINERAL	OSHA	TWA, RESPIRABLE	5 MG/M3	TABLE Z-1
ALUMINUM OXIDE MINERAL	OSHA	TWA, VACATED, AS DUST	10 MG/M3	
ALUMINUM OXIDE MINERAL	OSHA	TWA, AS TOTAL DUST	15 MG/M3	TABLE Z-1

VAC VACATED PEL:

VACATED PERMISSIBLE EXPOSURE LIMITS (PEL) ARE ENFORCED AS THE OSHA PEL IN SOME STATES. CHECK WITH YOUR LOCAL REGULATORY AGENCY.

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

CMRG: CHEMICAL MANUFACTURER RECOMMENDED GUIDELINE

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

AIHA:

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION WORKPLACE ENVIRONMENTAL EXPOSURE LEVEL (WEEL)

-----SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES -----

ODOR, COLOR, GRADE: ABRASIVE PRODUCT, NO ODOR.

GENERAL PHYSICAL FORM: SOLID

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

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FLAMMABLE LIMITS - LEL: NOT APPLICABLE
FLAMMABLE LIMITS - UEL: NOT APPLICABLE

BOILING POINT: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

SPECIFIC GRAVITY: NOT APPLICABLE

pH: NOT APPLICABLE

MELTING POINT: NOT APPLICABLE

SOLUBILITY IN WATER: NOT APPLICABLE

-----SECTION 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE.

MATERIALS AND CONDITIONS TO AVOID: NOT APPLICABLE

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

SUBSTANCE	CONDITION
CARBON MONOXIDE	DURING COMBUSTION
CARBON DIOXIDE	DURING COMBUSTION

-----SECTION 11: TOXICOLOGICAL INFORMATION -----

PLEASE CONTACT THE ADDRESS LISTED IN THE BEGINNING OF THIS MSDS FOR TOXICOLOGICAL INFORMATION ON THIS MATERIAL AND/OR ITS COMPONENTS.

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOTOXICOLOGICAL INFORMATION: NOT DETERMINED.

CHEMICAL FATE INFORMATION: NOT DETERMINED.

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:

THE SUBSTRATE THAT WAS ABRADED MUST BE CONSIDERED AS A FACTOR IN THE DISPOSAL METHOD FOR THIS PRODUCT. DISPOSE OF WASTE PRODUCT IN A SANITARY

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LANDFILL. AS A DISPOSAL ALTERNATIVE, INCINERATE IN AN INDUSTRIAL OR COMMERCIAL FACILITY.

SINCE REGULATIONS VARY, CONSULT APPLICABLE REGULATIONS OR AUTHORITIES BEFORE DISPOSAL.

-----SECTION 14: TRANSPORT INFORMATION -----

NOT REGULATED PER U.S. DOT, IATA OR IMO.

THESE TRANSPORTATION CLASSIFICATIONS ARE PROVIDED AS A CUSTOMER SERVICE. AS THE SHIPPER YOU REMAIN RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS, INCLUDING PROPER TRANSPORTATION CLASSIFICATION AND PACKAGING. 3M'S TRANSPORTATION CLASSIFICATIONS ARE BASED ON PRODUCT FORMULATION, PACKAGING, 3M POLICIES AND 3M'S UNDERSTANDING OF APPLICABLE CURRENT REGULATIONS. 3M DOES NOT GUARANTEE THE ACCURACY OF THIS CLASSIFICATION INFORMATION. THIS INFORMATION APPLIES ONLY TO TRANSPORTATION CLASSIFICATION AND NOT THE PACKAGING, LABELING, OR MARKING REQUIREMENTS. THE ORIGINAL 3M PACKAGE IS CERTIFIED FOR U.S. GROUND SHIPMENT ONLY. IF YOU ARE SHIPPING BY AIR OR OCEAN, THE PACKAGE MAY NOT MEET APPLICABLE REGULATORY REQUIREMENTS.

-----SECTION 15: REGULATORY INFORMATION -----

US FEDERAL REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

311/312 HAZARD CATEGORIES:

FIRE HAZARD: NO
PRESSURE HAZARD: NO
REACTIVITY HAZARD: NO
IMMEDIATE HAZARD: YES
DELAYED HAZARD: YES

STATE REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

CHEMICAL INVENTORIES:

THIS PRODUCT IS AN ARTICLE AS DEFINED BY TSCA REGULATIONS, AND IS EXEMPT FROM TSCA INVENTORY LISTING REQUIREMENTS.

CONTACT 3M FOR MORE INFORMATION.

INTERNATIONAL REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

THIS MSDS HAS BEEN PREPARED TO MEET THE U.S. OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.

-----SECTION 16: OTHER INFORMATION -----

NFPA HAZARD CLASSIFICATION:

HEALTH 1

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FLAMMABILITY 0
REACTIVITY 0
SPECIAL HAZARDS NONE

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS ARE DESIGNED FOR USE BY EMERGENCY RESPONSE PERSONNEL TO ADDRESS THE HAZARDS THAT ARE PRESENTED BY SHORT-TERM, ACUTE EXPOSURE TO A MATERIAL UNDER CONDITIONS OF FIRE, SPILL, OR SIMILAR EMERGENCIES. HAZARD RATINGS ARE PRIMARILY BASED ON THE INHERENT PHYSICAL AND TOXIC PROPERTIES OF THE MATERIAL BUT ALSO INCLUDE THE TOXIC PROPERTIES OF COMBUSTION OR DECOMPOSITION PRODUCTS THAT ARE KNOWN TO BE GENERATED IN SIGNIFICANT QUANTITIES.

REVISION CHANGES:

SECTION 14: TRANSPORTATION LEGAL TEXT WAS MODIFIED.
SECTION 14: TRANSPORTATION PHRASE WAS ADDED.
SECTION 2: INGREDIENT TABLE WAS ADDED.
SECTION 8: EXPOSURE GUIDELINES INGREDIENT INFORMATION WAS ADDED.
SECTION 8: EXPOSURE GUIDELINES LEGEND WAS ADDED.
SECTION 8: EXPOSURE GUIDELINES DATA SOURCE LEGEND WAS ADDED.

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BARNES DISTRIBUTION

Synonyms: KP84402
3M

MATERIAL SAFETY DATA SHEET

3M(TM) IMPERIAL FIBRE DISC, 3M(TM) IMPERIAL ROLOC DISC, 988R

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3M

MATERIAL SAFETY DATA SHEET

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-----SECTION 1: PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: 3M(TM) IMPERIAL FIBRE DISC, 3M(TM) IMPERIAL ROLOC DISC, 988R

MANUFACTURER: 3M

DIVISION: ABRASIVES SYSTEMS DIVISION

ADDRESS:
3M CENTER
ST. PAUL, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 OR (651) 737-6501 (24 HOURS)

ISSUE DATE: 03/19/2009

SUPERCEDES DATE: 3/29/2006

DOCUMENT GROUP: 08-4489-4

PRODUCT USE:
SPECIFIC USE: ABRASIVE PRODUCT

-----SECTION 2: INGREDIENTS -----

INGREDIENT	C.A.S. NO.	% BY WT
CUBITRON(TM) MINERAL	66402-68-4	40 - 60

BARNES DISTRIBUTION

FIBRE BACKING OR NYLON ROLOC BUTTON	NONE	20 - 40
CURED ADHESIVE	NONE	2 - 12
INORGANIC FLUORIDE	15096-52-3	5 - 10
FILLER	1317-65-3	5 - 10
TITANIUM DIOXIDE	13463-67-7	<2

-----SECTION 3: HAZARDS IDENTIFICATION -----

3.1 EMERGENCY OVERVIEW:

ODOR, COLOR, GRADE: SOLID ABRASIVE PRODUCT

GENERAL PHYSICAL FORM: SOLID

IMMEDIATE HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS:
THIS DOCUMENT COVERS ONLY THE 3M PRODUCT. FOR COMPLETE ASSESSMENT, WHEN DETERMINING THE DEGREE OF HAZARD, THE MATERIAL BEING ABRADED MUST ALSO BE CONSIDERED.

3.2 POTENTIAL HEALTH EFFECTS:

EYE CONTACT:

MECHANICAL EYE IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE PAIN, REDNESS, TEARING AND CORNEAL ABRASION.

DUST CREATED BY CUTTING, GRINDING, SANDING, OR MACHINING MAY CAUSE EYE IRRITATION. SIGNS/SYMPTOMS MAY INCLUDE REDNESS, SWELLING, PAIN, TEARING, AND BLURRED OR HAZY VISION.

SKIN CONTACT:

MECHANICAL SKIN IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE ABRASION, REDNESS, PAIN, AND ITCHING.

INHALATION:

DUST FROM CUTTING, GRINDING, SANDING OR MACHINING MAY CAUSE IRRITATION OF THE RESPIRATORY SYSTEM. SIGNS/SYMPTOMS MAY INCLUDE COUGH, SNEEZING, NASAL DISCHARGE, HEADACHE, HOARSENESS, AND NOSE AND THROAT PAIN.

DUST FROM CUTTING, GRINDING, SANDING OR MACHINING MAY CAUSE TARGET ORGAN EFFECTS.

INGESTION: NO HEALTH EFFECTS ARE EXPECTED.

TARGET ORGAN EFFECTS:

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PROLONGED OR REPEATED EXPOSURE MAY CAUSE:

HARD TISSUE EFFECTS:

SIGNS/SYMPTOMS MAY INCLUDE COLOR CHANGES IN THE TEETH AND NAILS; CHANGES IN DEVELOPMENT OF BONE, TEETH OR NAILS; WEAKENING OF THE BONES; AND/OR HAIR LOSS.

-----SECTION 4: FIRST AID MEASURES -----

4.1 FIRST AID PROCEDURES:

THE FOLLOWING FIRST AID RECOMMENDATIONS ARE BASED ON AN ASSUMPTION THAT APPROPRIATE PERSONAL AND INDUSTRIAL HYGIENE PRACTICES ARE FOLLOWED.

EYE CONTACT:

FLUSH EYES WITH LARGE AMOUNTS OF WATER. IF SIGNS/SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

SKIN CONTACT:

WASH AFFECTED AREA WITH SOAP AND WATER. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

INHALATION:

REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

IF SWALLOWED: NO NEED FOR FIRST AID IS ANTICIPATED.

-----SECTION 5: FIRE FIGHTING MEASURES -----

5.1 FLAMMABLE PROPERTIES:

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS - LEL: NOT APPLICABLE

FLAMMABLE LIMITS - UEL: NOT APPLICABLE

5.2 EXTINGUISHING MEDIA:

ORDINARY COMBUSTIBLE MATERIAL. USE FIRE EXTINGUISHERS WITH CLASS A EXTINGUISHING AGENTS (E.G., WATER, FOAM).

5.3 PROTECTION OF FIRE FIGHTERS:

SPECIAL FIRE FIGHTING PROCEDURES:

WEAR FULL PROTECTIVE EQUIPMENT (BUNKER GEAR) AND A SELF-CONTAINED BREATHING APPARATUS (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NOT APPLICABLE. NONE INHERENT IN THIS PRODUCT.

BARNES DISTRIBUTION

NOTE:

SEE STABILITY AND REACTIVITY (SECTION 10) FOR HAZARDOUS COMBUSTION AND THERMAL DECOMPOSITION INFORMATION.

-----SECTION 6: ACCIDENTAL RELEASE MEASURES -----

ACCIDENTAL RELEASE MEASURES: NOT APPLICABLE.

IN THE EVENT OF A RELEASE OF THIS MATERIAL, THE USER SHOULD DETERMINE IF THE RELEASE QUALIFIES AS REPORTABLE ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS.

-----SECTION 7: HANDLING AND STORAGE -----

7.1 HANDLING:

AVOID BREATHING OF DUST CREATED BY CUTTING, SANDING, GRINDING OR MACHINING. FOR INDUSTRIAL OR PROFESSIONAL USE ONLY. DAMAGED PRODUCT CAN BREAK APART DURING USE AND CAUSE SERIOUS INJURY TO FACE OR EYES. CHECK PRODUCT FOR DAMAGE SUCH AS CRACKS OR NICKS PRIOR TO USE. REPLACE IF DAMAGED. ALWAYS WEAR EYE AND FACE PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS. SPARKS AND PARTICLES FLYING FROM THE PRODUCT DURING SANDING OR GRINDING CAN CAUSE INJURY AND FIRE.

7.2 STORAGE: STORE IN A COOL, DRY PLACE.

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

8.1 ENGINEERING CONTROLS:

USE WITH APPROPRIATE LOCAL EXHAUST VENTILATION. PROVIDE APPROPRIATE LOCAL EXHAUST FOR CUTTING, GRINDING, SANDING OR MACHINING. USE GENERAL DILUTION VENTILATION AND/OR LOCAL EXHAUST VENTILATION TO CONTROL AIRBORNE EXPOSURES TO BELOW OCCUPATIONAL EXPOSURE LIMITS AND/OR CONTROL DUST, FUME, OR AIRBORNE PARTICLES. IF VENTILATION IS NOT ADEQUATE, USE RESPIRATORY PROTECTION EQUIPMENT.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE):

8.2.1 EYE/FACE PROTECTION:

AVOID EYE CONTACT. TO MINIMIZE THE RISK OF INJURY TO FACE AND EYES, ALWAYS WEAR EYE AND FACE PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS.

8.2.2 SKIN PROTECTION:

AVOID SKIN CONTACT. SELECT AND USE GLOVES AND/OR PROTECTIVE CLOTHING TO PREVENT SKIN CONTACT BASED ON THE RESULTS OF AN EXPOSURE ASSESSMENT. CONSULT WITH YOUR GLOVE AND/OR PROTECTIVE CLOTHING MANUFACTURER FOR SELECTION OF APPROPRIATE COMPATIBLE MATERIALS. WEAR APPROPRIATE GLOVES TO MINIMIZE RISK OF INJURY TO SKIN FROM CONTACT WITH DUST OR PHYSICAL ABRASION FROM GRINDING OR SANDING.

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8.2.3 RESPIRATORY PROTECTION:

AVOID BREATHING OF DUST CREATED BY CUTTING, SANDING, GRINDING OR MACHINING. AVOID BREATHING OF DUST CREATED BY SANDING, GRINDING OR MACHINING. ASSESS EXPOSURE CONCENTRATIONS OF ALL MATERIALS INVOLVED IN THE WORK PROCESS. CONSIDER MATERIAL BEING ABRADED WHEN DETERMINING THE APPROPRIATE RESPIRATORY PROTECTION. SELECT AND USE APPROPRIATE RESPIRATORS TO PREVENT INHALATION OVEREXPOSURE.

8.2.4 PREVENTION OF SWALLOWING: WASH HANDS AFTER HANDLING AND BEFORE EATING.

8.3 EXPOSURE GUIDELINES:

INGREDIENT	AUTHORITY	TYPE	LIMIT	ADDITIONAL INFORMATION
FLUORIDES	ACGIH	TWA, AS F	2.5 MG/M3	TABLE A4
FLUORIDES	OSHA	TWA, AS F	2.5 MG/M3	TABLE Z-1A
FILLER	ACGIH	TWA	10 MG/M3	
FILLER	OSHA	TWA, RESPIRABLE	5 MG/M3	TABLE Z-1
FILLER	OSHA	TWA, AS TOTAL DUST	15 MG/M3	TABLE Z-1
TITANIUM DIOXIDE	ACGIH	TWA	10 MG/M3	TABLE A4
TITANIUM DIOXIDE	CMRG	TWA, AS RESPIRABLE DUST	5 MG/M3	
TITANIUM DIOXIDE	OSHA	TWA, VACATED, AS DUST	10 MG/M3	
TITANIUM DIOXIDE	OSHA	TWA, AS TOTAL DUST	15 MG/M3	TABLE Z-1

VAC VACATED PEL:

VACATED PERMISSIBLE EXPOSURE LIMITS (PEL) ARE ENFORCED AS THE OSHA PEL IN SOME STATES. CHECK WITH YOUR LOCAL REGULATORY AGENCY.

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

CMRG: CHEMICAL MANUFACTURER RECOMMENDED GUIDELINE

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

AIHA:

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION WORKPLACE ENVIRONMENTAL EXPOSURE LEVEL (WEEL)

-----SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES -----

BARNES DISTRIBUTION

ODOR, COLOR, GRADE: SOLID ABRASIVE PRODUCT

GENERAL PHYSICAL FORM: SOLID

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS - LEL: NOT APPLICABLE

FLAMMABLE LIMITS - UEL: NOT APPLICABLE

BOILING POINT: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

SPECIFIC GRAVITY: NOT APPLICABLE

pH: NOT APPLICABLE

MELTING POINT: NOT APPLICABLE

SOLUBILITY IN WATER: NOT APPLICABLE

-----SECTION 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE.

MATERIALS AND CONDITIONS TO AVOID: NOT APPLICABLE

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

SUBSTANCE	CONDITION
CARBON MONOXIDE	DURING COMBUSTION
CARBON DIOXIDE	DURING COMBUSTION
HYDROGEN FLUORIDE	DURING COMBUSTION

HAZARDOUS DECOMPOSITION:

UNDER RECOMMENDED USAGE CONDITIONS, HAZARDOUS DECOMPOSITION PRODUCTS ARE NOT EXPECTED. HAZARDOUS DECOMPOSITION PRODUCTS MAY OCCUR AS A RESULT OF OXIDATION, HEATING, OR REACTION WITH ANOTHER MATERIAL.

-----SECTION 11: TOXICOLOGICAL INFORMATION -----

ORDER NO: 1655579 RELEASE NO: 002 MSDS NO: 005371

BARNES DISTRIBUTION

PLEASE CONTACT THE ADDRESS LISTED IN THE BEGINNING OF THIS MSDS FOR TOXICOLOGICAL INFORMATION ON THIS MATERIAL AND/OR ITS COMPONENTS.

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOTOXICOLOGICAL INFORMATION: NOT DETERMINED.

CHEMICAL FATE INFORMATION: NOT DETERMINED.

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:

THE SUBSTRATE THAT WAS ABRADED MUST BE CONSIDERED AS A FACTOR IN THE DISPOSAL METHOD FOR THIS PRODUCT. DISPOSE OF WASTE PRODUCT IN A SANITARY LANDFILL. AS A DISPOSAL ALTERNATIVE, INCINERATE IN AN INDUSTRIAL OR COMMERCIAL FACILITY. COMBUSTION PRODUCTS WILL INCLUDE HF. FACILITY MUST BE CAPABLE OF HANDLING HALOGENATED MATERIALS.

SINCE REGULATIONS VARY, CONSULT APPLICABLE REGULATIONS OR AUTHORITIES BEFORE DISPOSAL.

-----SECTION 14: TRANSPORT INFORMATION -----

PLEASE CONTACT THE EMERGENCY NUMBERS LISTED IN THE BEGINNING OF THIS MSDS FOR TRANSPORTATION INFORMATION FOR THIS MATERIAL.

-----SECTION 15: REGULATORY INFORMATION -----

US FEDERAL REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

311/312 HAZARD CATEGORIES:

FIRE HAZARD: NO
PRESSURE HAZARD: NO
REACTIVITY HAZARD: NO
IMMEDIATE HAZARD: YES
DELAYED HAZARD: NO

STATE REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

CHEMICAL INVENTORIES:

THIS PRODUCT IS AN ARTICLE AS DEFINED BY TSCA REGULATIONS, AND IS EXEMPT FROM TSCA INVENTORY LISTING REQUIREMENTS.

CONTACT 3M FOR MORE INFORMATION.

INTERNATIONAL REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

THIS MSDS HAS BEEN PREPARED TO MEET THE U.S. OSHA HAZARD COMMUNICATION

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STANDARD, 29 CFR 1910.1200.

-----SECTION 16: OTHER INFORMATION -----

NFPA HAZARD CLASSIFICATION:

HEALTH 1
FLAMMABILITY 0
REACTIVITY 0
SPECIAL HAZARDS NONE

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS ARE DESIGNED FOR USE BY EMERGENCY RESPONSE PERSONNEL TO ADDRESS THE HAZARDS THAT ARE PRESENTED BY SHORT-TERM, ACUTE EXPOSURE TO A MATERIAL UNDER CONDITIONS OF FIRE, SPILL, OR SIMILAR EMERGENCIES. HAZARD RATINGS ARE PRIMARILY BASED ON THE INHERENT PHYSICAL AND TOXIC PROPERTIES OF THE MATERIAL BUT ALSO INCLUDE THE TOXIC PROPERTIES OF COMBUSTION OR DECOMPOSITION PRODUCTS THAT ARE KNOWN TO BE GENERATED IN SIGNIFICANT QUANTITIES.

REVISION CHANGES:

SECTION 3: POTENTIAL EFFECTS FROM EYE CONTACT WAS MODIFIED.

SECTION 3: POTENTIAL EFFECTS FROM INHALATION INFORMATION WAS MODIFIED.

SECTION 3: IMMEDIATE OTHER HAZARD(S) WAS MODIFIED.

SECTION 2: INGREDIENT TABLE WAS MODIFIED.

SECTION 8: EXPOSURE GUIDELINES INGREDIENT INFORMATION WAS MODIFIED.

SECTION 3: CARCINOGENICITY HEADING WAS DELETED.

SECTION 4:

FIRST AID FOR INGESTION (SWALLOWING) - DECONTAMINATION - WAS DELETED.

SECTION 4:

FIRST AID FOR INGESTION (SWALLOWING) - INTERVENTION - WAS DELETED.

SECTION 4:

FIRST AID FOR INGESTION (SWALLOWING) - MEDICAL ASSISTANCE - WAS DELETED.

SECTION 3: CARCINOGENICITY PHRASE WAS DELETED.

SECTION 3: CARCINOGENICITY TABLE WAS DELETED.

DISCLAIMER:

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ORDER NO: 1655579 RELEASE NO: 002 MSDS NO: 005371

B A R N E S D I S T R I B U T I O N

GIVEN THE VARIETY OF FACTORS THAT CAN AFFECT THE USE AND APPLICATION OF A 3M PRODUCT, SOME OF WHICH ARE UNIQUELY WITHIN THE USER'S KNOWLEDGE AND CONTROL, IT IS ESSENTIAL THAT THE USER EVALUATE THE 3M PRODUCT TO DETERMINE WHETHER IT IS FIT FOR A PARTICULAR PURPOSE AND SUITABLE FOR USER'S METHOD OF USE OR APPLICATION.

3M PROVIDES INFORMATION IN ELECTRONIC FORM AS A SERVICE TO ITS CUSTOMERS. DUE TO THE REMOTE POSSIBILITY THAT ELECTRONIC TRANSFER MAY HAVE RESULTED IN ERRORS, OMISSIONS OR ALTERATIONS IN THIS INFORMATION, 3M MAKES NO REPRESENTATIONS AS TO ITS COMPLETENESS OR ACCURACY. IN ADDITION, INFORMATION OBTAINED FROM A DATABASE MAY NOT BE AS CURRENT AS THE INFORMATION IN THE MSDS AVAILABLE DIRECTLY FROM 3M.

3M MSDSS ARE AVAILABLE AT WWW.3M.COM

ORDER NO: 3076055 RELEASE NO: 002 MSDS NO: 005442

BARNES DISTRIBUTION

Synonyms: -23541-R -23542-R -23543-R -23544-R 23538 23540 23541 23542 23543 23544
23545

CHANGYUAN

SHENZHEN CHNGYUAN ELECTRONIC MATERIAL CO., LTD.

MATERIAL SAFETY DATA SHEET

-----1. PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: HEAT SHRINKABLE TUBE

GRADE: CB-HFT

COMPANY IDENTIFICATION:

SUPPLIER: CHANGYUAN ELECTRONICS (SHENZHEN) CO., LTD.

ADDRESS:

BLD#30-4

SHENZHEN SCIENCE & TECHNOLOGY INDUSTRY PARK

NANSHAN, SHENZHEN

CHINA

DEPARTMENT: QUALITY DEPT

TELEPHONE NO: 86-755-26553710

FAX NO: 86-755-26553700

DATE: 2010-3-19

PREPARED BY: MR ZHAO

-----2. COMPOSITION/INFORMATION ON INGREDIENTS -----

CHEMICAL NAME: ETHYLENE VINYL ACETATE

CAS NO.: 24937-78-8

COMPOSITION: MORE THAN 50%

CHEMICAL FORMULA: $-(CH_2-CH_2-)_n-(CH_2-C_3H_4O_2)_m-$

CONTAINS: Mg(OH)2: 40%

CAS NO.: 1309-42-8

-----3. HAZARDS IDENTIFICATION -----

HAZARDS WARNING IS NOT REQUIRED.

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-----4. FIRST-AID MEASURES -----

EYE CONTACT:

FLUSH THE EYES WITH PLENTY OF WATER WITHOUT RUBBING THE EYES WITH HANDS. GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

SKIN CONTACT:

WASH CONTAMINATED SKIN WITH SOAP AND WATER AFTER CONTACT WITH PROCESSING VAPORS AND FUMES. IMMEDIATELY COOL CONTAMINATED SKIN WITH WATER AND GET MEDICAL AFTER CONTACT WITH MELTON RESIN.

INHALATION:

IF FUMES ARE INHALED, REMOVE THE PERSON TO FRESH AIR. IF BREATHING IS DIFFICULT, GET MEDICAL ATTENTION.

INGESTION:

THIS PRODUCT DOES NOT SHOW SIGNIFICANT ACUTE TOXICITY. GET MEDICAL ATTENTION IF CONSIDERABLE AMOUNTS OF THIS PRODUCT ARE INGESTED.

-----5. FIRE-FIGHTING MEASURES -----

SPECIAL FIREFIGHTING PROCEDURES:

THIS PRODUCT IS A SELF-EXTINGUISH THERMOPLASTIC MATERIAL AND WHEN IGNITED IT WILL RELEASE BLACK FUMES.

EXTINGUISHING MEDIA: WATER SPRAY OR OTHER CLASS A EXTINGUISHING AGENT.

SKIN CONTACT:

THE MELTING MATERIAL WILL CAUSE SKIN-BURN. SO WHEN INJURED, THEY MUST WENT FOR DOCTORS.

-----6. HANDLING AND STORAGE -----

HANDLING AND STORAGE THIS PRODUCT IN PLACE WHERE ARE NO EXPOSURE TO DIRECT SUNLIGHT OR ELEVATED TEMPERATURE OR THERE ARE NO IGNITION SAURCES. WHEN THE TEMPERATURE IS ABOVE 60 DEG. C IS LASTED FOR A LONG TIME, THE TUBE WILL SHTINK.

-----7. PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE: TUBE

BOILING POINT: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

MELTING POINT: NOT APPLICABLE

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BARNES DISTRIBUTION

SPECIFIC GRAVITY: 1.3 G/CM3

OXIDIZIBILITY: NONE UNDER NORMAL HANDLING CONDITIONS

EXPOSITION LIMIT: NOT APPLICABLE

SOLUBILITY IN WATER: NEGLIGIBLE

ODOR: ACID

-----8. STABILITY & REACTIVITY -----

THERMAL DECOMPOSITION: DECOMPOSITION BEGINS AT 300 DEG. C

REACTIVITY WITH WATER: NONE

SELF-REACTIVITY: NONE

HAZARDOUS REACTIONS: NO HAZARDOUS REACTION OBSERVED.

-----9. TOXICOLOGICAL INFORMATION -----

SKIN CORROSIVITY: NONE

IRRITATION: NONE

ACUTE TOXICITY: NOT KNOW

SUB-ACUTE TOXICITY: NOT KNOW

CHRONIC TOXICITY: NOT KNOW

MUTAGENIC EFFECTS: NOT KNOW

-----10. ECOLOGICAL INFORMATION -----

BIODEGRADABILITY: THIS PRODUCT IS NOT BIODEGRADABLE.

BIOACCUMULATION: THIS PRODUCT IS NOT BIOACCUMULATION

FISH TOXICITY: NOT KNOW.

-----11. DISPOSAL CONSIDERATIONS -----

DISPOSE OF WASTE BY INCINERATION, SANITARY LANDFILL OR OTHER METHOD IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS.

CONSULT YOUR ATTORNEY OR APPROPRIATE REGULATORY OFFICIALS FOR INFORMATION ON SUCH DISPOSAL.

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-----12. TRANSPORT INFORMATION -----

UN NO:

DECLARATION FOR LAND SHIPMENT:

DECLARATION FOR SEE SHIPMENT:

DECLARATION FOR SHIPMENT BY AIR: NOT DANGEROUS CARGO. KEEP DRY

-----13. REGULATORY INFORMATION -----

LABELLING ACCORDING TO EEC DIRECTIVE: NOT REQUIRED.

-----14. OTHER INFORMATION -----

THE DATA GIVEN HERE IS BASED ON CURRENT KNOWLEDGE AND EXPERIENCE. THE PURSE OF THIS SAFETY DATA SHEET IS TO DESCRIBE THE PRODUCTS IN TERMS OF THEIR SAFETY REQUIREMENTS. THE DATA DOES NOT SIGNIFY ANY WARRANTY WITH REGARD TO THE PRODUCT'S PROPERTIES.

ORDER NO: 0208286 RELEASE NO: 001 MSDS NO: 005500

BARNES DISTRIBUTION

Synonyms: 21344 21373
GOJO(R*)

DATE: 15 OCTOBER 2007

SUPERCEDES: 12 NOVEMBER 2004

MATERIAL SAFETY DATA SHEET

IN CASE OF EMERGENCY CALL CHEMTREC AT: 1-800-424-9300

-----1. PRODUCT IDENTIFICATION AND COMPANY IDENTIFICATION -----

PRODUCT NAME: GOJO(R*) POWER GOLD(R*) HAND CLEANER

COMPANY NAME & ADDRESS:
GOJO INDUSTRIES, INC.
ONE GOJO PLAZA, SUITE 500
AKRON, OH 44311

EMERGENCY PHONE: 1-800-424-9300 CHEMTREC

NON-EMERGENCY PHONE: (330) 255-6000

MSDS REQUEST PHONE: (330) 255-6000 X8804

-----2. INFORMATION ON INGREDIENTS -----

HAZARDOUS INGREDIENTS	CAS NUMBER	OSHA PEL	ACGIH TLV	% RANGE
PERLITE AS DUST	93763-70-3	NOT ESTABLISHED	TWA: 10 MG/M3	<5

OTHER INGREDIENT(S) WITH NOTIFICATION REQUIREMENTS	CAS NUMBER	LIST
PETROLEUM DISTILLATES	8002-05-9	MA 1; NJ 1; PA 1
PROPYLENE GLYCOL	57-55-6	PA 1; CN 1

-----3. HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:
WHEN USED ACCORDING TO INSTRUCTIONS, THE PRODUCT APPLICABLE TO THIS MSDS IS SAFE AND PRESENTS NO IMMEDIATE OR LONG-TERM HEALTH HAZARD. HOWEVER, ABNORMAL ENTRY ROUTES, SUCH AS GROSS INGESTION, MAY REQUIRE IMMEDIATE MEDICAL ATTENTION.

POTENTIAL HEALTH EFFECTS:

BARNES DISTRIBUTION

HMIS:
HEALTH 1
FLAMMABILITY 0
REACTIVITY 0
PERSONAL PROTECTION NONE

EYE CONTACT: MAY CAUSE EYE IRRITATION.

SKIN CONTACT: NO IRRITATION OR REACTION EXPECTED.

INHALATION: NOT APPLICABLE.

INGESTION: MAY CAUSE UPSET STOMACH, NAUSEA (ABNORMAL ENTRY ROUTE).

CARCINOGENICITY: NOT LISTED AS A CARCINOGEN BY NTP, IARC, OSHA OR ACGIH.

-----4. FIRST AID MEASURES -----

EYE CONTACT:
DO NOT RUB EYES. FLUSH EYES THOROUGHLY WITH WATER FOR 15 MINUTES.
IF CONDITION WORSENS OR IRRITATION PERSISTS, CONTACT PHYSICIAN.

SKIN CONTACT: NOT APPLICABLE.

INHALATION: NOT APPLICABLE.

INGESTION:
DO NOT INDUCE VOMITING. CONTACT A PHYSICIAN OR POISON CONTROL CENTER.

-----5. FIRE FIGHTING MEASURES -----

NFPA:
HEALTH 0
FIRE 0
REACTIVITY 0

FLASH POINT DEG. F/DEG. C (PMCC METHOD): >212 DEG. F/100 DEG. C

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE KNOWN.

SPECIAL FIRE FIGHTING PROCEDURES: NONE KNOWN.

EXTINGUISHING MEDIA:

- (X) WATER FOG
- (X) ALCOHOL FOAM
- (X) CO2
- (X) DRY CHEMICAL
- () OTHER

-----6. ACCIDENTAL RELEASE MEASURES -----

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NO SPECIAL REQUIREMENTS. WATER CLEAN UP AND RINSE. CAUTION - WILL CAUSE SLIPPERY SURFACES.

-----7. HANDLING AND STORAGE -----

STORE AT NORMAL ROOM TEMPERATURE AWAY FROM REACH OF SMALL CHILDREN. KEEP CONTAINERS SEALED. USE OLDER CONTAINERS FIRST. AVOID FREEZING CONDITIONS.

-----8. EXPOSURE CONTROLS/PERSONAL PROTECTION -----

EYE PROTECTION: NONE REQUIRED UNDER NORMAL CONDITIONS.

SKIN PROTECTION: NONE REQUIRED UNDER NORMAL CONDITIONS.

RESPIRATORY PROTECTION: NONE REQUIRED UNDER NORMAL CONDITIONS.

VENTILATION: NONE REQUIRED UNDER NORMAL CONDITIONS.

PROTECTIVE EQUIPMENT OR CLOTHING: NONE REQUIRED UNDER NORMAL CONDITIONS.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE AND ODOR: OPAQUE GREEN LIQUID WITH ABRASIVES, CITRUS ODOR

pH (UNDILUTED): NOT AVAILABLE

VOC, %: 3.5 - 3.7

-----10. STABILITY AND REACTIVITY -----

STABLE/NON REACTIVE PRODUCT.

-----11. TOXICOLOGICAL INFORMATION -----

NO ACUTE OR CHRONIC TOXIC EFFECTS EXPECTED WHEN USED ACCORDING TO DIRECTIONS.

-----12. ECOLOGICAL CONSIDERATIONS -----

NO ECOLOGICAL OR SPECIAL CONSIDERATIONS WHEN USED ACCORDING TO DIRECTIONS. NOT CONSIDERED ENVIRONMENTALLY HARMFUL FROM NORMAL DILUTION, EXPECTED USAGE AND TYPICAL DRAINAGE TO SEWERS, SEPTIC SYSTEMS AND TREATMENT PLANTS.

-----13. DISPOSAL CONSIDERATIONS -----

ORDER NO: 0208286 RELEASE NO: 001 MSDS NO: 005500

BARNES DISTRIBUTION

NO SPECIAL CONSIDERATIONS WHEN DISPOSED ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.

-----14. TRANSPORT INFORMATION -----

NOT CLASSIFIED AS A HAZARDOUS MATERIAL.

-----15. REGULATORY AND OTHER INFORMATION -----

TSCA:

ALL INGREDIENTS ARE LISTED OR EXEMPT PER REFERENCE 15 USC 2602 (2)(B)(IV). COMPLIES WITH CURRENT FDA REGULATIONS FOR COSMETIC AND/OR OVER-THE-COUNTER DRUG PRODUCTS.

NOTICE:

THE INFORMATION HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE AS OF THE DATE OF PREPARATION OF THIS MATERIAL SAFETY DATA SHEET. HOWEVER, NO WARRANTY OR REPRESENTATION, EXPRESSED OR IMPLIED, IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE FOREGOING DATA AND SAFETY INFORMATION. THE USER ASSUMES ALL LIABILITY FOR ANY DAMAGE OR INJURY RESULTING FROM ABNORMAL USE, FROM ANY FAILURE TO ADHERE TO RECOMMENDED PRACTICES OR FROM ANY HAZARDS INHERENT IN THE NATURE OF THE PRODUCT.

DOCUMENT#: 7596-503

ORDER NO: 6302710 RELEASE NO: 001 MSDS NO: 040162

BARNES DISTRIBUTION

Synonyms: BD1069 BD1069-1
MATERIAL SAFETY DATA SHEET

ISSUING DATE: 19-FEB-2013

REVISION DATE: 19-FEB-2013

VERSION: 1

-----1. PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: BD1069 BATTERY TERMINAL PROTECTOR
PRODUCT CODE: F01551
PRODUCT TYPE: EXTREMELY FLAMMABLE AEROSOL
RECOMMENDED USE: BATTERY PROTECTANT

MANUFACTURED FOR:
BARNES DISTRIBUTION
1301 E. 9TH STREET, SUITE 700
CLEVELAND, OH 44114-1824

MANUFACTURED BY:
AMERICAN JETWAY CORPORATION
34136 MYRTLE STREET
WAYNE, MI 48184-0126

CHEMICAL EMERGENCY PHONE NUMBER:
303-623-5716 ROCKY MOUNTAIN POISON CONTROL 24 HR

-----2. HAZARDS IDENTIFICATION -----

DANGER!

EMERGENCY OVERVIEW:
EXTREMELY FLAMMABLE AEROSOL

CONTENTS UNDER PRESSURE

IRRITATING TO RESPIRATORY SYSTEM

IRRITATING TO SKIN

IRRITATING TO EYES

INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING CONTENTS MAY
BE HARMFUL OR FATAL

APPEARANCE: OPAQUE

PHYSICAL STATE: AEROSOL

BARNES DISTRIBUTION

ODOR: SOLVENT

OSHA REGULATORY STATUS:

THIS MATERIAL IS CONSIDERED HAZARDOUS BY THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS:

PRINCIPLE ROUTES OF EXPOSURE: EYE CONTACT. SKIN CONTACT. INHALATION.

ACUTE TOXICITY:

EYES: IRRITATING TO EYES.

SKIN:

IRRITATING TO SKIN. PROLONGED SKIN CONTACT MAY DEFAT THE SKIN AND PRODUCE DERMATITIS. MAY CAUSE FROSTBITE.

INHALATION:

IRRITATING TO RESPIRATORY SYSTEM. AVOID BREATHING VAPORS OR MISTS. SYMPTOMS OF OVEREXPOSURE ARE DIZZINESS, HEADACHE, TIREDNESS, NAUSEA, UNCONSCIOUSNESS, CESSATION OF BREATHING.

INGESTION:

NOT AN EXPECTED ROUTE OF EXPOSURE. POTENTIAL FOR ASPIRATION IF SWALLOWED. MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING AND DIARRHEA.

CHRONIC EFFECTS: NO INFORMATION AVAILABLE.

AGGRAVATED MEDICAL CONDITIONS:

CENTRAL NERVOUS SYSTEM. PREEXISTING EYE DISORDERS. SKIN DISORDERS. RESPIRATORY DISORDERS. PERIPHERAL NERVOUS SYSTEM (PNS).

INTERACTIONS WITH OTHER CHEMICALS:

USE OF ALCOHOLIC BEVERAGES MAY ENHANCE TOXIC EFFECTS

ENVIRONMENTAL HAZARD: SEE SECTION 12 FOR ADDITIONAL ECOLOGICAL INFORMATION

-----3. COMPOSITION/INFORMATION ON INGREDIENTS -----

CAS # 110-54-3, HEXANE, MAY BE SUBSTITUTED FOR CAS # 64742-49-0, COMMERCIAL HEXANES.

CHEMICAL NAME	CAS-NO	WEIGHT %
PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	7-13
XYLENE	1330-20-7	7-13
NAPHTHENIC OIL, SEVERELY HYDROTREATED	64742-52-5	3-7
HEXANE	110-54-3	1-5

ORDER NO: 6302710 RELEASE NO: 001 MSDS NO: 040162

B A R N E S D I S T R I B U T I O N

ETHYL BENZENE	100-41-4	1-5
HYDROTREATED HEAVY NAPHTHENIC	64742-01-4	1-5

-----4. FIRST AID MEASURES -----

GENERAL ADVICE:
SHOW THIS MATERIAL SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.

EYE CONTACT:
IMMEDIATELY FLUSH WITH PLENTY OF WATER. AFTER INITIAL FLUSHING, REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES.

SKIN CONTACT:
WASH OFF IMMEDIATELY WITH SOAP AND PLENTY OF WATER. WASH CONTAMINATED CLOTHING BEFORE REUSE. IF SKIN IRRITATION PERSISTS, CALL A PHYSICIAN.

INHALATION:
MOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

INGESTION: DO NOT INDUCE VOMITING. CALL PHYSICIAN IMMEDIATELY.

NOTES TO PHYSICIAN: NO INFORMATION AVAILABLE.

-----5. FIRE-FIGHTING MEASURES -----

FLAMMABLE PROPERTIES: EXTREMELY FLAMMABLE AEROSOL.

FLASH POINT: -141 DEG. F / -96.4 DEG. C

METHOD: BASED ON PROPELLANT

SUITABLE EXTINGUISHING MEDIA:
FOAM. DRY CHEMICAL. ALCOHOL-RESISTANT FOAM. CARBON DIOXIDE (CO2).

HAZARDOUS COMBUSTION PRODUCTS: CARBON OXIDES.

EXPLOSION DATA:

SENSITIVITY TO STATIC DISCHARGE: NO INFORMATION AVAILABLE.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:
CONTAINERS CAN BUILD UP PRESSURE IF EXPOSED TO HEAT (FIRE). KEEP CONTAINERS AND SURROUNDING AREAS COOL WITH WATER SPRAY.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS:
AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS PRESSURE-DEMAND, MSHA/NIOSH (APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR.

NFPA:

BARNES DISTRIBUTION

HEALTH HAZARD 2
FLAMMABILITY 4
STABILITY 0
PHYSICAL AND CHEMICAL HAZARDS

HMIS:
HEALTH HAZARD 2*
FLAMMABILITY 2
PHYSICAL HAZARD
PERSONAL PROTECTION B

* CHRONIC HEALTH HAZARD REPEATED OR PROLONGED EXPOSURE MAY CAUSE CENTRAL NERVOUS SYSTEM DAMAGE

-----6. ACCIDENTAL RELEASE MEASURES -----

PERSONAL PRECAUTIONS:
ENSURE ADEQUATE VENTILATION. FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL PRECAUTIONS:
DO NOT FLUSH INTO SURFACE WATER OR SANITARY SEWER SYSTEM.

METHODS FOR CONTAINMENT:
PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO.

METHODS FOR CLEANING UP:
USE A NON-COMBUSTIBLE MATERIAL LIKE VERMICULITE, SAND OR EARTH TO SOAK UP THE PRODUCT AND PLACE INTO A CONTAINER FOR LATER DISPOSAL.

-----7. HANDLING AND STORAGE -----

ADVICE ON SAFE HANDLING:
AVOID CONTACT WITH EYES. AVOID BREATHING VAPORS OR MISTS. CONTENTS UNDER PRESSURE. DO NOT PUNCTURE OR INCINERATE CANS. DO NOT STICK PIN OR ANY OTHER SHARP OBJECT INTO OPENING ON TOP OF CAN.

TECHNICAL MEASURES/STORAGE CONDITIONS:
KEEP OUT OF THE REACH OF CHILDREN. INCOMPATIBLE WITH OXIDIZING AGENTS.

AEROSOL LEVEL: 1

-----8. EXPOSURE CONTROLS/PERSONAL PROTECTION -----

EXPOSURE GUIDELINES:

CHEMICAL NAME	ACGIH TLV	OSHA PEL	NIOSH IDLH
XYLENE	STEL: 150 PPM	TWA: 100 PPM	
1330-20-7	TWA: 100 PPM	TWA: 435 MG/M3 (VACATED) TWA: 100 PPM	

B A R N E S D I S T R I B U T I O N

(VACATED) TWA: 435 MG/M3
(VACATED) STEL: 150 PPM
(VACATED) STEL: 655 MG/M3

HEXANE 110-54-3	TWA: 50 PPM S*	TWA: 500 PPM TWA: 1800 MG/M3 (VACATED) TWA: 50 PPM (VACATED) TWA: 180 MG/M3	IDLH: 1100 PPM TWA: 50 PPM TWA: 180 MG/M3
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ETHYL BENZENE 100-41-4	TWA: 20 PPM	TWA: 100 PPM TWA: 435 MG/M3 (VACATED) TWA: 100 PPM (VACATED) TWA: 435 MG/M3 (VACATED) STEL: 125 PPM (VACATED) STEL: 545 MG/M3	IDLH: 800 PPM TWA: 100 PPM TWA: 435 MG/M3 STEL: 125 PPM STEL: 545 MG/M3
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TOLUENE 108-88-3	TWA: 20 PPM	TWA: 200 PPM (VACATED) TWA: 100 PPM (VACATED) TWA: 375 MG/M3 (VACATED) STEL: 150 PPM (VACATED) STEL: 560 MG/M3 CEILING: 300 PPM	IDLH: 500 PPM TWA: 100 PPM TWA: 375 MG/M3 STEL: 150 PPM STEL: 560 MG/M3
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BENZENE 71-43-2	STEL: 2.5 PPM TWA: 0.5 PPM S*	TWA: 10 PPM APPLIES TO INDUSTRY SEGMENTS EXEMPT FROM THE BENZENE STANDARD AT 29 CFR 1910.1028 TWA: 1 PPM (VACATED) TWA: 10 PPM UNLESS SPECIFIED IN 1910.1028 (VACATED) STEL: 50 PPM 10 MIN UNLESS SPECIFIED IN 1910.1028 (VACATED) CEILING: 25 PPM UNLESS SPECIFIED IN 1910.1028 CEILING: 25 PPM STEL: 5 PPM SEE 29 CFR 1910.1028	IDLH: 500 PPM TWA: 0.1 PPM STEL: 1 PPM
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OTHER EXPOSURE GUIDELINES:
VACATED LIMITS REVOKED BY THE COURT OF APPEALS DECISION IN AFL-CIO V. OSHA,
965 F.2D 962 (11TH CIR., 1992).

ENGINEERING MEASURES: ENSURE ADEQUATE VENTILATION.

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: SAFETY GLASSES WITH SIDE-SHIELDS.

B A R N E S D I S T R I B U T I O N

SKIN AND BODY PROTECTION:

WEAR IMPERVIOUS PROTECTIVE CLOTHING, INCLUDING BOOTS, GLOVES, LAB COAT, APRON OR COVERALLS, AS APPROPRIATE, TO PREVENT SKIN CONTACT.

RESPIRATORY PROTECTION:

IF EXPOSURE LIMITS ARE EXCEEDED OR IRRITATION IS EXPERIENCED, NIOSH/MSHA APPROVED RESPIRATORY PROTECTION SHOULD BE WORN.

HYGIENE MEASURES:

DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. GENERAL INDUSTRIAL HYGIENE PRACTICE. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH HANDS AND FACE BEFORE BREAKS AND IMMEDIATELY AFTER HANDLING THE PRODUCT. AVOID BREATHING VAPORS, MIST OR GAS.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: AEROSOL

APPEARANCE: OPAQUE

ODOR: SOLVENT

COLOR: PINK

PROPERTY	VALUES	REMARKS - METHODS
PH	9.75	
BOILING POINT/BOILING RANGE		NO INFORMATION AVAILABLE
FLASH POINT	-96.4 DEG. C / -141 DEG. F	BASED ON PROPELLANT
FLAMMABILITY LIMITS IN AIR UPPER FLAMMABILITY LIMIT LOWER FLAMMABILITY LIMIT		NO DATA AVAILABLE
VAPOR PRESSURE		NOT DETERMINED
VAPOR DENSITY		HEAVIER THAN AIR
SPECIFIC GRAVITY	1.31	NO INFORMATION AVAILABLE
WATER SOLUBILITY		NO INFORMATION AVAILABLE
VISCOSITY, KINEMATIC		NO INFORMATION AVAILABLE
FLAME EXTENSION W/O EXT TUBE	18	
FLAME EXTENSION WITH EXT TUBE	NA	
FLASH BACK W/O EXT TUBE	1	
FLASH BACK WITH EXT TUBE	NA	

BARNES DISTRIBUTION

VOC CONTENT(%) 30.16

-----10. STABILITY AND REACTIVITY -----

STABILITY: STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

INCOMPATIBLE PRODUCTS: STRONG OXIDIZING AGENTS.

CONDITIONS TO AVOID: STRONG OXIDIZING AGENTS. STRONG BASES.

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON OXIDES. FUMES.

HAZARDOUS REACTIONS: NO INFORMATION AVAILABLE.

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION DOES NOT OCCUR.

-----11. TOXICOLOGICAL INFORMATION -----

ACUTE TOXICITY:

PRODUCT INFORMATION:

CAUSES SKIN, EYE AND RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF SWALLOWED.

CHEMICAL NAME	LD50 ORAL	LD50 DERMAL	LC50 INHALATION
XYLENE	4300 MG/KG (RAT)	1700 MG/KG (RABBIT)	5000 PPM (RAT) 4 H 47635 MG/L (RAT) 4 H
NAPHTHENIC OIL, SEVERELY HYDROTREATED	5000 MG/KG (RAT)	5000 MG/KG (RABBIT)	5 MG/L (RAT) 4 H
HEXANE	25 G/KG (RAT)	3000 MG/KG (RABBIT)	48000 PPM (RAT) 4 H
ETHYL BENZENE	3500 MG/KG (RAT)	15354 MG/KG (RABBIT)	17.2 MG/L (RAT) 4 H
HYDROTREATED HEAVY NAPHTHENIC	5000 MG/KG (RAT)	2000 MG/KG (RABBIT)	2.18 MG/L (RAT) 4 H

CHRONIC TOXICITY:

CARCINOGENICITY:

THE TABLE BELOW INDICATES WHETHER EACH AGENCY HAS EVALUATED A LISTED INGREDIENT AS A CARCINOGEN.

CHEMICAL NAME	ACGIH	IARC	NTP	OSHA
XYLENE		GROUP 3		

B A R N E S D I S T R I B U T I O N

ETHYL BENZENE	A3	GROUP 2B	X
HYDROTREATED HEAVY NAPHTHENIC	A2		X

ACGIH (AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS):

A2 - SUSPECTED HUMAN CARCINOGEN

A3 - ANIMAL CARCINOGEN

IARC (INTERNATIONAL AGENCY FOR RESEARCH ON CANCER):

GROUP 2B - POSSIBLY CARCINOGENIC TO HUMANS

GROUP 3 - NOT CLASSIFIABLE AS TO CARCINOGENICITY IN HUMANS

OSHA (OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION):

X - PRESENT

TARGET ORGAN EFFECTS:

CENTRAL NERVOUS SYSTEM. EYES. PERIPHERAL NERVOUS SYSTEM (PNS). RESPIRATORY SYSTEM. SKIN.

-----12. ECOLOGICAL INFORMATION -----

ECOTOXICITY:

THE ENVIRONMENTAL IMPACT OF THIS PRODUCT HAS NOT BEEN FULLY INVESTIGATED.

-----13. DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHODS:

DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

CONTAMINATED PACKAGING: DO NOT RE-USE EMPTY CONTAINERS.

-----14. TRANSPORT INFORMATION -----

DOT GROUND: CONSUMER COMMODITY ORM-D OR LIMITED QUANTITY

IATA: UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

IMDG: UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD. QTY.

-----15. REGULATORY INFORMATION -----

INTERNATIONAL INVENTORIES:

TSCA: TSCA

DSL:

NDSL: COMPLIES

EINECS:

ELINCS:

ENCS:

BARNES DISTRIBUTION

IECSC:
KECL:
PICCS:
AICS:

CHEMICAL NAME	TSCA	DSL	NDSL	EINECS	ELINCS
PROPANE/ISOBUTANE/ N-BUTANE	PRESENT	X	NOT LISTED	270-705-8	NOT LISTED
XYLENE	PRESENT	X	NOT LISTED	215-535-7	NOT LISTED
NAPHTHENIC OIL, SEVERELY HYDROTREATED	PRESENT	X	NOT LISTED	265-155-0	NOT LISTED
HEXANE	PRESENT	X	NOT LISTED	203-777-6	NOT LISTED
ETHYL BENZENE	T	X	NOT LISTED	202-849-4	NOT LISTED
HYDROTREATED HEAVY NAPHTHENIC	PRESENT	X	NOT LISTED	265-101-6	NOT LISTED

CHEMICAL NAME	ENCS	IECSC	KECL	PICCS	AICS
PROPANE/ISOBUTANE/ N-BUTANE	NOT LISTED	X	KE-28192	X	X
XYLENE	PRESENT	X	KE-35427	X	X
NAPHTHENIC OIL, SEVERELY HYDROTREATED	PRESENT	X	KE-12543	X	X
HEXANE	PRESENT	X	KE-18626	X	X
ETHYL BENZENE	PRESENT	X	KE-13532	X	X
HYDROTREATED HEAVY NAPHTHENIC	NOT LISTED	X	KE-30124	X	X

TSCA: UNITED STATES TOXIC SUBSTANCES CONTROL ACT SECTION 8(B) INVENTORY

DSL/NDSL: CANADIAN DOMESTIC SUBSTANCES LIST/NON-DOMESTIC SUBSTANCES LIST

EINECS/ELINCS:
EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES/EU LIST OF NOTIFIED CHEMICAL SUBSTANCES

ENCS: JAPAN EXISTING AND NEW CHEMICAL SUBSTANCES

IECSC: CHINA INVENTORY OF EXISTING CHEMICAL SUBSTANCES

KECL: KOREAN EXISTING AND EVALUATED CHEMICAL SUBSTANCES

BARNES DISTRIBUTION

PICCS: PHILIPPINES INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES

AICS: AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES

U.S. FEDERAL REGULATIONS:

SARA 313:

SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA). THIS PRODUCT CONTAINS A CHEMICAL OR CHEMICALS WHICH ARE SUBJECT TO THE REPORTING REQUIREMENTS OF THE ACT AND TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, PART 372:

CHEMICAL NAME	SARA 313 - THRESHOLD VALUES %
XYLENE	1.0
HEXANE	1.0
ETHYL BENZENE	0.1

SARA 311/312 HAZARD CATEGORIES:

- ACUTE HEALTH HAZARD: YES
- CHRONIC HEALTH HAZARD: YES
- FIRE HAZARD: YES
- SUDDEN RELEASE OF PRESSURE HAZARD: NO
- REACTIVE HAZARD: NO

U.S. STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS THE FOLLOWING PROPOSITION 65 CHEMICALS:

CHEMICAL NAME	CALIFORNIA PROP. 65
ETHYL BENZENE	CARCINOGEN
TOLUENE	DEVELOPMENTAL FEMALE REPRODUCTIVE
BENZENE	CARCINOGEN DEVELOPMENTAL MALE REPRODUCTIVE

U.S. STATE RIGHT-TO-KNOW REGULATIONS:

CHEMICAL NAME	MASSACHUSETTS	NEW JERSEY	PENNSYLVANIA	ILLINOIS	RHODE ISLAND
XYLENE	X	X	X	X	
HEXANE	X	X	X	X	
ORGANOPHOSPHATE ESTER, ZINC SALT		X	X		

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TOLUENE	X	X	X	X
AMMONIA	X	X	X	

INTERNATIONAL REGULATIONS:

CHEMICAL NAME	CARCINOGEN STATUS	EXPOSURE LIMITS
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XYLENE		MEXICO: TWA: 100 PPM
		MEXICO: TWA: 435 MG/M3
		MEXICO: STEL: 150 PPM
		MEXICO: STEL: 655 MG/M3
HEXANE		MEXICO: TWA: 50 PPM
		MEXICO: TWA: 176 MG/M3
ETHYL BENZENE		MEXICO: TWA: 100 PPM
		MEXICO: TWA: 435 MG/M3
		MEXICO: STEL: 125 PPM
		MEXICO: STEL: 545 MG/M3

CANADA:
THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

-----16. OTHER INFORMATION -----

PREPARED BY:
AMERICAN JETWAY
34136 MYRTLE STREET
WAYNE, MI 48184

ISSUING DATE: 19-FEB-2013

ORDER NO: 6302710 RELEASE NO: 001 MSDS NO: 040162

BARNES DISTRIBUTION

REVISION DATE: 19-FEB-2013

REVISION NOTE: NO INFORMATION AVAILABLE.

DISCLAIMER:

THE INFORMATION PROVIDED ON THIS MSDS IS CORRECT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF AT THE DATE OF ITS PUBLICATION. THE INFORMATION GIVEN IS DESIGNED ONLY AS A GUIDE FOR SAFE HANDLING, USE, PROCESSING, STORAGE, TRANSPORTATION, DISPOSAL AND RELEASE AND IS NOT TO BE CONSIDERED AS A WARRANTY OR QUALITY SPECIFICATION. THE INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS, UNLESS SPECIFIED IN THE TEXT.

F01551 - BD1069 BATTERY TERMINAL PROT.

ORDER NO: 1572521 RELEASE NO: 001 MSDS NO: 005788

BARNES DISTRIBUTION

Synonyms: BD1068 BD1068-1
MATERIAL SAFETY DATA SHEET

-----SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: BD1068 BATTERY CLEANER

IDENTIFICATION NUMBER: A-3055 0718-55

DATE PRINTED: 02/11/09

PRODUCT USE/CLASS: BATTERY CLEANER

MANUFACTURED BY:
AMERICAN JETWAY CORPORATION
34136 MYRTLE STREET
WAYNE, MICHIGAN 48184-0126

EMERGENCY AGENCY:
CHEMTREC: 1-800-424-9300 (24 HOURS)

PREPARER:
CUSTOMER SERVICE, PHONE:
PREPARE DATE: 02/11/09

-----SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS -----

ITEM	CHEMICAL NAME	CAS NUMBER	WEIGHT %
01	PROPANE/ISOBUTANE/N-BUTANE	68476-86-8	10-20
02	TRIETHANOLAMINE	102-71-6	1-10

EXPOSURE LIMITS:

ITEM	ACGIH		OSHA		COMPANY	
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	TLV-TWA	SKIN
01	1000 PPM	N.E.	800 PPM	N.E.	N.E.	YES
02	5 MG/M3	N.E.	N.E.	N.E.	N.E.	NO

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

-----SECTION 3 - HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:
VAPORS IRRITATING TO EYES AND RESPIRATORY TRACT. VAPORS MAY CAUSE FLASH FIRE OR EXPLOSION.

BARNES DISTRIBUTION

EFFECTS OF OVEREXPOSURE - EYE CONTACT:

LIQUID, AEROSOLS AND VAPORS OF THIS PRODUCT ARE IRRITATING AND CAN CAUSE PAIN, TEARING, REDDENING AND SWELLING ACCOMPANIED BY A STINGING SENSATION AND/OR A FEELING LIKE THAT OF FINE DUST IN THE EYES.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT:

PROLONGED OR REPEATED CONTACT CAN RESULT IN DEFATTING AND DRYING OF THE SKIN WHICH MAY RESULT IN SKIN IRRITATION AND DERMATITIS (RASH).

EFFECTS OF OVEREXPOSURE - INHALATION:

HEADACHES, DIZZINESS, NAUSEA, DECREASED BLOOD PRESSURE, CHANGES IN HEART RATE AND CYANOSIS MAY RESULT FROM OVER-EXPOSURE TO VAPOR OR SKIN EXPOSURE. PROLONGED INHALATION MAY BE HARMFUL.

EFFECTS OF OVEREXPOSURE - INGESTION:

THIS MATERIAL MAY BE HARMFUL OR FATAL IF SWALLOWED. IF A CORROSIVE PRODUCT, MAY CAUSE SEVERE AND PERMANENT DAMAGE TO MOUTH, THROAT AND STOMACH.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS:

OVEREXPOSURE MAY CAUSE NERVOUS SYSTEM DAMAGE. OVEREXPOSURE MAY CAUSE LUNG DAMAGE. OVEREXPOSURE MAY CAUSE KIDNEY DAMAGE. MAY CAUSE LIVER DISORDER (E.G., EDEMA, PROTEINURIA) AND DAMAGE.

PRIMARY ROUTE(S) OF ENTRY:

SKIN CONTACT

INHALATION

INGESTION

EYE CONTACT

-----SECTION 4 - FIRST AID MEASURES -----

FIRST AID - EYE CONTACT:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER. GET MEDICAL ATTENTION, IF IRRITATION PERSISTS.

FIRST AID - SKIN CONTACT:

WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.

FIRST AID - INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET IMMEDIATE MEDICAL ATTENTION.

FIRST AID - INGESTION:

GET MEDICAL ATTENTION IMMEDIATELY. IF SWALLOWED, DO NOT INDUCE VOMITING. GIVE VICTIM A GLASS OF WATER OR MILK. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

-----SECTION 5 - FIRE FIGHTING MEASURES -----

FLASH POINT: -156 F (PENSKEY-MARTENS C.C.)

BARNES DISTRIBUTION

LOWER EXPLOSIVE LIMIT: 1.3 %
UPPER EXPLOSIVE LIMIT: 10.0 %

AUTOIGNITION TEMPERATURE: ND

EXTINGUISHING MEDIA:

ALCOHOL FOAM
CO2
DRY CHEMICAL
WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:

VAPORS CAN TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK. "EMPTY" CONTAINERS RETAIN PRODUCT RESIDUE (LIQUID AND/OR VAPOR) AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY RETURNED TO A DRUM RECONDITIONER, OR PROPERLY DISPOSED OF.

SPECIAL FIREFIGHTING PROCEDURES:

CONTAINERS CAN BUILD UP PRESSURE IF EXPOSED TO HEAT (FIRE). AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS PRESSURE-DEMAND (MSHA/NIOSH APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR.

-----SECTION 6 - ACCIDENTAL RELEASE MEASURES -----

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

ABSORB SPILL WITH INERT MATERIAL (E.G. DRY SAND OR EARTH), THEN PLACE IN A CHEMICAL WASTE CONTAINER.

-----SECTION 7 - HANDLING AND STORAGE -----

AEROSOL LEVEL:

HANDLING: WASH THOROUGHLY AFTER HANDLING.

STORAGE: KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP FROM FREEZING.

-----SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION -----

ENGINEERING CONTROLS:

LOCAL EXHAUST VENTILATION MAY BE NECESSARY TO CONTROL ANY AIR CONTAMINANTS TO WITHIN THEIR TLVS DURING THE USE OF THIS PRODUCT.

RESPIRATORY PROTECTION:

A NIOSH/MSHA APPROVED AIR PURIFYING RESPIRATOR WITH AN ORGANIC VAPOR CARTRIDGE OR CANISTER MAY BE PERMISSIBLE UNDER CERTAIN CIRCUMSTANCES WHERE AIRBORNE CONCENTRATIONS ARE EXPECTED TO EXCEED EXPOSURE LIMITS. PROTECTION

ORDER NO: 1572521 RELEASE NO: 001 MSDS NO: 005788

BARNES DISTRIBUTION

PROVIDED BY AIR PURIFYING RESPIRATORS IS LIMITED. USE A POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR IF THERE IS ANY POTENTIAL FOR AN UNCONTROLLED RELEASE, EXPOSURE LEVELS ARE NOT KNOWN, OR ANY OTHER CIRCUMSTANCES WHERE AIR PURIFYING RESPIRATORS MAY NOT PROVIDE ADEQUATE PROTECTION.

SKIN PROTECTION:

WHERE CONTACT IS LIKELY, WEAR CHEMICAL RESISTANT GLOVES, A CHEMICAL SUIT, RUBBER BOOTS, AND CHEMICAL SAFETY GOGGLES PLUS A FACE SHIELD.

EYE PROTECTION:

WEAR SAFETY GLASSES WITH SIDE SHIELDS (OR GOGGLES) AND A FACE SHIELD.

OTHER PROTECTIVE EQUIPMENT:

STANDARD INDUSTRIAL CLOTHING STANDARDS SHOULD BE FOLLOWED.

HYGIENIC PRACTICES:

WASH HANDS BEFORE EATING. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE. USE ONLY IN A WELL VENTILATED AREA.

FOLLOW ALL MSDS/LABEL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTIED BECAUSE THEY MAY RETAIN PRODUCT RESIDUES. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. AVOID BREATHING VAPORS FROM HEATED MATERIAL. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING.

-----SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES -----

BOILING RANGE: -12 - 651 F

VAPOR DENSITY: IS HEAVIER THAN AIR

ODOR: AMINE

ODOR THRESHOLD: ND

APPEARANCE: AMBER

EVAPORATION RATE: IS FASTER THAN BUTYL ACETATE

SOLUBILITY IN H2O: COMPLETE

FREEZE POINT: ND

SPECIFIC GRAVITY: 0.9486

VAPOR PRESSURE: ND

pH @ 100.0 %: 9

PHYSICAL STATE: AEROSOL

VISCOSITY: NA

ORDER NO: 1572521 RELEASE NO: 001 MSDS NO: 005788

BARNES DISTRIBUTION
COEFFICIENT OF WATER/OIL DISTRIBUTION: ND

VOLATILE ORGANIC COMPOUNDS (VOCs): 1.04 LBS/GAL, 125 GRAMS/LTR

VOC, % (WT):

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

-----SECTION 10 - STABILITY AND REACTIVITY -----

CONDITIONS TO AVOID:

ALL SOURCES OF IGNITION, WELDING ARCS, AND OPEN FLAMES.

INCOMPATIBILITY: STRONG ACIDS, ALKALIS, OXIDIZERS, AND AMINES.

HAZARDOUS DECOMPOSITION PRODUCTS:

OXIDES OF CARBON, OXIDES OF NITROGEN, AND MAY PRODUCE FORMS OF CHLORIDE, CHLORINE, AND PHOSGENE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR UNDER NORMAL CONDITIONS.

STABILITY: THIS PRODUCT IS STABLE UNDER NORMAL STORAGE CONDITIONS.

-----SECTION 11 - TOXICOLOGICAL PROPERTIES -----

PRODUCT LD50: 2000 MG/KG

PRODUCT LC50: 900 PPM

COMPONENT TOXICOLOGICAL INFORMATION:

CHEMICAL NAME	LD50	LC50
WATER	90000 MG/KG/RAT	NE
PROPANE/ISOBUTANE/N-BUTANE	NE	658000 MG/M3/4H RAT
TRIETHANOLAMINE	>2000 MG/KG/RAT	N.E.

-----SECTION 12 - ECOLOGICAL INFORMATION -----

ECOLOGICAL INFORMATION: NO INFORMATION.

-----SECTION 13 - DISPOSAL CONSIDERATIONS -----

DISPOSAL METHOD:

DISPOSE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

-----SECTION 14 - TRANSPORTATION INFORMATION -----

ORDER NO: 1572521 RELEASE NO: 001 MSDS NO: 005788

BARNES DISTRIBUTION

DOT PROPER SHIPPING NAME: CONSUMER COMMODITY

DOT TECHNICAL NAME:

DOT HAZARD CLASS: ORM-D

HAZARD SUBCLASS:

DOT UN/NA NUMBER:

PACKING GROUP:

RESP. GUIDE PAGE: 126

DOT EXEMPTIONS:

DOT SPECIAL INSTRUCTIONS:

IMDG SHIPPING INFORMATION:

IMDG PROPERTY SHIPPING NAME:

IMDG TECHNICAL NAME:

IMDG HAZARD CLASS:

HAZARD SUBCLASS:

PACKING GROUP:

FLASH POINT, C: 0

IMDG EXEMPTIONS:

IMDG SPECIAL INSTRUCTIONS:

MARINE POLLUTANT (YES/NO):

IATA SHIPPING INFORMATION:

IATA PROPERTY SHIPPING NAME:

IATA TECHNICAL NAME:

IATA HAZARD CLASS:

HAZARD SUBCLASS:

PACKING GROUP:

IATA EXEMPTIONS:

BARNES DISTRIBUTION

IATA SPECIAL INSTRUCTIONS:

-----SECTION 15 - REGULATORY INFORMATION -----

U.S. FEDERAL REGULATIONS: AS FOLLOWS

OSHA:

HAZARDOUS BY DEFINITION OF HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

CERCLA - SARA HAZARD CATEGORY:

THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA 'HAZARD CATEGORIES' PROMULGATED UNDER SECTIONS 311 AND 312 OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 (SARA TITLE III) AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES:

- IMMEDIATE HEALTH HAZARD
- CHRONIC HEALTH HAZARD
- FIRE HAZARD
- PRESSURIZED GAS HAZARD

SARA SECTION 313:

THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

CHEMICAL NAME	CAS NUMBER	WT/WT % IS LESS THAN
---------------	------------	----------------------

NO SARA SECTION 313 COMPONENTS EXIST IN THIS PRODUCT.

TOXIC SUBSTANCES CONTROL ACT:

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF TSCA 12(B) IF EXPORTED FROM THE UNITED STATES:

CHEMICAL NAME	CAS NUMBER
---------------	------------

NO INFORMATION IS AVAILABLE.

U.S. STATE REGULATIONS: AS FOLLOWS

NEW JERSEY RIGHT-TO-KNOW:

THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP FIVE COMPONENTS IN THIS PRODUCT:

CHEMICAL NAME	CAS NUMBER
---------------	------------

WATER	7732-18-5
-------	-----------

SODIUM BICARBONATE	144-55-8
--------------------	----------

PENNSYLVANIA RIGHT-TO-KNOW:

THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT GREATER THAN 3%:

ORDER NO: 1572521 RELEASE NO: 001 MSDS NO: 005788

B A R N E S D I S T R I B U T I O N

CHEMICAL NAME CAS NUMBER

WATER 7732-18-5

SODIUM BICARBONATE 144-55-8

CALIFORNIA PROPOSITION 65:

WARNING:

THE CHEMICAL(S) NOTED BELOW AND CONTAINED IN THIS PRODUCT, ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM:

CHEMICAL NAME CAS NUMBER

NO PROPOSITION 65 CHEMICALS EXIST IN THIS PRODUCT.

INTERNATIONAL REGULATIONS: AS FOLLOWS

CANADIAN WHMIS:

THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR USE OF THE 16 HEADINGS.

CANADIAN WHMIS CLASS: NO INFORMATION AVAILABLE.

-----SECTION 16 - OTHER INFORMATION -----

HMIS RATINGS:

HEALTH 2
FLAMMABILITY 4
REACTIVITY 0

PREVIOUS MSDS REVISION DATE: 10/15/08

REASON FOR REVISION: UPDATE

LEGEND:

N.A. - NOT APPLICABLE
N.E. - NOT ESTABLISHED
N.D. - NOT DETERMINED

THIS MSDS IS NOT FOR REPRODUCTION OR DISTRIBUTION

THE INFORMATION CONTAINED ON THIS MSDS HAS BEEN CHECKED AND SHOULD BE ACCURATE. HOWEVER, IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

PRODUCT: A-3055 0718-55

ORDER NO: 0968364 RELEASE NO: 001 MSDS NO: 005911

BARNES DISTRIBUTION

Synonyms: BD1495 BD1495-1
MATERIAL SAFETY DATA SHEET

-----SECTION 1: PRODUCT & COMPANY IDENTIFICATION -----

PRODUCT NAME: BARNES BRAKE CLEANER (AEROSOL)

PRODUCT NUMBER(S): BD1495

PRODUCT USE: BRAKE PARTS CLEANER

MANUFACTURED FOR:
BARNES DISTRIBUTION
THE GALLERIA/TOWER AT ERIEVIEW
1301 EAST 9TH STREET, STE #700
CLEVELAND, OH 44114

GENERAL INFORMATION: (866) 438-6767 M-F 8 AM - 5 PM

24-HR EMERGENCY: (303) 739-1178 (CONTACT DENNIS LEMON)

-----SECTION 2: HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:

DANGER:
VAPOR HARMFUL. CONTENTS UNDER PRESSURE.

AS DEFINED BY OSHA'S HAZARD COMMUNICATION STANDARD, THIS PRODUCT IS HAZARDOUS.

APPEARANCE & ODOR: COLORLESS LIQUID, IRRITATING ODOR AT HIGH CONCENTRATIONS

POTENTIAL HEALTH EFFECTS:

ACUTE EFFECTS:

EYE:
MAY CAUSE SLIGHT TEMPORARY EYE IRRITATION. VAPORS MAY IRRITATE THE EYES AT CONCENTRATIONS OF 100 PPM.

SKIN:
SHORT SINGLE EXPOSURES MAY CAUSE SKIN IRRITATION. PROLONGED EXPOSURE MAY CAUSE SEVERE SKIN IRRITATION, EVEN A BURN. A SINGLE PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH SKIN IN HARMFUL AMOUNTS.

INHALATION:
DIZZINESS MAY OCCUR AT CONCENTRATIONS OF 200 PPM. PROGRESSIVELY HIGHER LEVELS MAY ALSO CAUSE NASAL IRRITATION, NAUSEA, INCOORDINATION, AND DRUNKENNESS. VERY HIGH LEVELS OR PROLONGED EXPOSURE COULD LEAD TO UNCONSCIOUSNESS AND DEATH.

INGESTION:

BARNES DISTRIBUTION

SINGLE DOSE ORAL TOXICITY IS CONSIDERED TO BE EXTREMELY LOW. SWALLOWING LARGE AMOUNTS MAY CAUSE INJURY IF ASPIRATED INTO THE LUNGS. THIS MAY BE RAPIDLY ABSORBED THROUGH THE LUNGS AND RESULT IN INJURY TO OTHER BODY SYSTEMS.

CHRONIC EFFECTS:

REPEATED CONTACT WITH SKIN MAY CAUSE DRYING OR FLAKING OF SKIN. EXCESSIVE OR LONG TERM EXPOSURE TO VAPORS MAY INCREASE SENSITIVITY TO EPINEPHRINE AND INCREASE MYOCARDIAL IRRITABILITY.

TARGET ORGANS: CENTRAL NERVOUS SYSTEM. POSSIBLY LIVER AND KIDNEY.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: NONE KNOWN.

SEE SECTION 11 FOR TOXICOLOGY AND CARCINOGENICITY INFORMATION ON PRODUCT INGREDIENTS.

-----SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS -----

COMPONENT	CAS NUMBER	% BY WT.
TETRACHLOROETHYLENE (PERC)	127-18-4	>95
CARBON DIOXIDE	124-38-9	<5

-----SECTION 4: FIRST AID MEASURES -----

EYE CONTACT:

IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. CALL A PHYSICIAN IF IRRITATION PERSISTS.

SKIN CONTACT:

REMOVE CONTAMINATED CLOTHING AND WASH AFFECTED AREA WITH SOAP AND WATER. CALL A PHYSICIAN IF IRRITATION PERSISTS. WASH CONTAMINATED CLOTHING PRIOR TO RE-USE.

INHALATION:

REMOVE PERSON TO FRESH AIR. KEEP PERSON CALM, IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT GIVE OXYGEN. CALL A PHYSICIAN.

INGESTION: DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.

NOTE TO PHYSICIANS:

BECAUSE RAPID ABSORPTION MAY OCCUR THROUGH LUNGS IF ASPIRATED AND CAUSE SYSTEMIC EFFECTS, THE DECISION OF WHETHER TO INDUCE VOMITING OR NOT SHOULD BE MADE BY A PHYSICIAN. IF LAVAGE IS PERFORMED, SUGGEST ENDOTRACHEAL AND/OR ESOPHAGEAL CONTROL. IF BURN IS PRESENT, TREAT AS ANY THERMAL BURN, AFTER DECONTAMINATION. EXPOSURE MAY INCREASE MYOCARDIAL IRRITABILITY. DO NOT ADMINISTER SYMPATHOMIMETIC DRUGS UNLESS ABSOLUTELY NECESSARY. NO SPECIFIC ANTIDOTE.

BARNES DISTRIBUTION

-----SECTION 5: FIRE-FIGHTING MEASURES -----

FLAMMABLE PROPERTIES:

THIS PRODUCT IS NONFLAMMABLE IN ACCORDANCE WITH AEROSOL FLAMMABILITY DEFINITIONS. (SEE 16 CFR 1500.3(C)(6))

FLASH POINT: NONE (TCC)

AUTOIGNITION TEMPERATURE: NONE

UPPER EXPLOSIVE LIMIT: NONE

LOWER EXPLOSIVE LIMIT: NONE

FIRE AND EXPLOSION DATA:

SUITABLE EXTINGUISHING MEDIA:

THIS MATERIAL DOES NOT BURN. USE EXTINGUISHING AGENT SUITABLE FOR SURROUNDING FIRE.

PRODUCTS OF COMBUSTION:

HYDROGEN CHLORIDE, TRACE AMOUNTS OF PHOSGENE AND CHLORINE

EXPLOSION HAZARDS:

AEROSOL CONTAINERS, WHEN EXPOSED TO HEAT FROM FIRE, MAY BUILD PRESSURE AND EXPLODE.

PROTECTION OF FIRE-FIGHTERS:

FIREFIGHTERS SHOULD WEAR SELF-CONTAINED, NIOSH-APPROVED BREATHING APPARATUS FOR PROTECTION AGAINST SUFFOCATION AND POSSIBLE TOXIC DECOMPOSITION PRODUCTS. PROPER EYE AND SKIN PROTECTION SHOULD BE PROVIDED. USE WATER SPRAY TO KEEP FIRE-EXPOSED CONTAINERS COOL AND TO KNOCK DOWN VAPORS WHICH MAY RESULT FROM PRODUCT DECOMPOSITION.

-----SECTION 6: ACCIDENTAL RELEASE MEASURES -----

PERSONAL PRECAUTIONS:

USE PERSONAL PROTECTION RECOMMENDED IN SECTION 8. DO NOT BREATHE VAPORS.

ENVIRONMENTAL PRECAUTIONS:

TAKE PRECAUTIONS TO PREVENT CONTAMINATION OF GROUND AND SURFACE WATERS. DO NOT FLUSH INTO SEWERS OR STORM DRAINS.

METHODS FOR CONTAINMENT & CLEAN-UP:

DIKE AREA TO CONTAIN SPILL. VENTILATE THE AREA WITH FRESH AIR. IF IN CONFINED SPACE OR LIMITED AIR CIRCULATION AREA, CLEAN-UP WORKERS SHOULD WEAR APPROPRIATE RESPIRATORY PROTECTION. RECOVER OR ABSORB SPILLED MATERIAL USING AN ABSORBENT DESIGNED FOR CHEMICAL SPILLS. PLACE USED ABSORBENTS INTO PROPER WASTE CONTAINERS.

-----SECTION 7: HANDLING AND STORAGE -----

BARNES DISTRIBUTION

HANDLING PROCEDURES:

VAPORS OF THIS PRODUCT ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW AREAS. MAKE SURE VENTILATION REMOVES VAPORS FROM LOW AREAS. DO NOT EAT, DRINK OR SMOKE WHILE USING THIS PRODUCT. USE CAUTION AROUND ENERGIZED EQUIPMENT. THE METAL CONTAINER WILL CONDUCT ELECTRICITY IF IT CONTACTS A LIVE SOURCE. THIS MAY RESULT IN INJURY TO THE USER FROM ELECTRICAL SHOCK AND/OR FLASH FIRE. FOR PRODUCT USE INSTRUCTIONS, PLEASE SEE THE PRODUCT LABEL.

STORAGE PROCEDURES:

STORE IN A COOL DRY AREA OUT OF DIRECT SUNLIGHT. AEROSOL CANS MUST BE MAINTAINED BELOW 120 F TO PREVENT CANS FROM RUPTURING.

AEROSOL STORAGE LEVEL: I

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

EXPOSURE GUIDELINES:

COMPONENT	OSHA		ACGIH		OTHER SOURCE	UNIT
	TWA	STEL	TWA	STEL		
TETRACHLOROETHYLENE	100	N.E.	25	100	N.E.	PPM
CARBON DIOXIDE	5000	30000 V	5000	30,000	N.E.	PPM

N.E. - NOT ESTABLISHED

(C) - CEILING

(S) - SKIN

(V) - VACATED

CONTROLS AND PROTECTION:

ENGINEERING CONTROLS:

AREA SHOULD HAVE VENTILATION TO PROVIDE FRESH AIR. LOCAL EXHAUST VENTILATION IS GENERALLY PREFERRED BECAUSE IT CAN CONTROL THE EMISSIONS OF THE CONTAMINANT AT THE SOURCE, PREVENTING DISPERSION INTO THE GENERAL WORK AREA. USE MECHANICAL MEANS IF NECESSARY TO MAINTAIN VAPOR LEVELS BELOW THE EXPOSURE GUIDELINES. IF WORKING IN A CONFINED SPACE, FOLLOW APPLICABLE OSHA REGULATIONS.

RESPIRATORY PROTECTION:

NONE REQUIRED FOR NORMAL WORK WHERE ADEQUATE VENTILATION IS PROVIDED. IF ENGINEERING CONTROLS ARE NOT FEASIBLE OR IF EXPOSURE EXCEEDS THE APPLICABLE EXPOSURE LIMITS, USE A NIOSH-APPROVED CARTRIDGE RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE. AIR MONITORING IS NEEDED TO DETERMINE ACTUAL EMPLOYEE EXPOSURE LEVELS. USE A SELF-CONTAINED BREATHING APPARATUS IN CONFINED SPACES AND FOR EMERGENCIES.

B A R N E S D I S T R I B U T I O N

EYE/FACE PROTECTION:

FOR NORMAL CONDITIONS, WEAR SAFETY GLASSES. WHERE THERE IS REASONABLE PROBABILITY OF LIQUID CONTACT, WEAR SPLASH-PROOF GOGGLES.

SKIN PROTECTION:

USE PROTECTIVE GLOVES SUCH AS PVA, TEFLON, OR VITON. ALSO, USE FULL PROTECTIVE CLOTHING IF THERE IS PROLONGED OR REPEATED CONTACT OF LIQUID WITH SKIN.

-----SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: LIQUID

COLOR: COLORLESS

ODOR: IRRITATING ODOR

ODOR THRESHOLD: 50 PPM

SPECIFIC GRAVITY: 1.619

INITIAL BOILING POINT: 250 F

FREEZING POINT: ND

VAPOR PRESSURE: 13 MMHg @ 68 F

VAPOR DENSITY: 5.76 (AIR = 1)

EVAPORATION RATE: VERY FAST

SOLUBILITY: 0.015 G/100 G @ 77 F IN WATER

COEFFICIENT OF WATER/OIL DISTRIBUTION (LOG POW): 2.88

pH: NA

VOLATILE ORGANIC COMPOUNDS:

WT %: 0

G/L: 0

LBS./GAL: 0

-----SECTION 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE

CONDITIONS TO AVOID:

AVOID DIRECT SUNLIGHT OR ULTRAVIOLET SOURCES. AVOID OPEN FLAMES, WELDING ARCS, AND OTHER HIGH TEMPERATURE SOURCES WHICH INDUCE THERMAL DECOMPOSITION.

INCOMPATIBLE MATERIALS:

BARNES DISTRIBUTION

AVOID CONTACT WITH METALS SUCH AS:
ALUMINUM POWDERS, MAGNESIUM POWDERS, POTASSIUM, SODIUM, AND ZINC POWDER.
AVOID UNINTENDED CONTACT WITH AMINES. AVOID CONTACT WITH STRONG BASES AND STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS:
HYDROGEN CHLORIDE, TRACE AMOUNTS OF CHLORINE AND PHOSGENE

POSSIBILITY OF HAZARDOUS REACTIONS: NO

-----SECTION 11: TOXICOLOGICAL INFORMATION -----

LONG-TERM TOXICOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT.

THE FOLLOWING INFORMATION IS AVAILABLE FOR COMPONENTS OF THIS PRODUCT:

ACUTE TOXICITY:

COMPONENT	ORAL LD50 (RAT)	DERMAL LD50 (RABBIT)	INHALATION LC50 (RAT)
TETRACHLOROETHYLENE	2629 MG/KG	>10 G/KG	5200 MG/KG/4H
CARBON DIOXIDE	NO DATA	NO DATA	470,000 PPM/30M

CHRONIC TOXICITY:

COMPONENT	OSHA CARCINOGEN	IARC CARCINOGEN	NTP CARCINOGEN
TETRACHLOROETHYLENE	NO	GROUP 2A	REASONABLY ANTICIPATED TO BE A CARCINOGEN
CARBON DIOXIDE	NO	NO	

COMPONENT	IRRITANT	SENSITIZER
TETRACHLOROETHYLENE	E (MILD) / S (SEVERE)	NO
CARBON DIOXIDE	NONE	NO

E - EYE

S - SKIN

R - RESPIRATORY

REPRODUCTIVE TOXICITY: NO INFORMATION AVAILABLE

TERATOGENICITY: NO INFORMATION AVAILABLE

BARNES DISTRIBUTION

MUTAGENICITY:

TETRACHLOROETHYLENE:
IN VITRO STUDIES WERE NEGATIVE
ANIMAL STUDIES WERE NEGATIVE

SYNERGISTIC EFFECTS: NO INFORMATION AVAILABLE

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT. THE FOLLOWING INFORMATION IS AVAILABLE FOR COMPONENTS OF THIS PRODUCT.

ECOTOXICITY:

TETRACHLOROETHYLENE:
96 HR LC50 RAINBOW TROUT: 5.28 MG/L (STATIC)
96 HR LC50 FATHEAD MINNOW: 13.4 MG/L (FLOW-THROUGH)

PERSISTENCE / DEGRADABILITY:
BIODEGRADATION UNDER AEROBIC CONDITIONS IS BELOW DETECTABLE LIMITS.

BIODEGRADATION MAY OCCUR UNDER ANAEROBIC CONDITIONS. BIODEGRADATION RATE MAY INCREASE IN SOIL AND/OR WATER WITH ACCLIMATION.

BIOACCUMULATION / ACCUMULATION:
BIOCONCENTRATION POTENTIAL IS LOW (BCF LESS THAN 100).

MOBILITY IN ENVIRONMENT: POTENTIAL FOR MOBILITY IN SOIL IS MEDIUM.

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

WASTE CLASSIFICATION:
THE DISPENSED LIQUID PRODUCT IS A RCRA HAZARDOUS WASTE FOR TOXICITY WITH THE FOLLOWING POTENTIAL WASTE CODES:
U210, F001, F002, D039. PRESSURIZED CONTAINERS ARE A D003 REACTIVE WASTE.
(SEE 40 CFR PART 261.20 - 261.33)

EMPTY AEROSOL CONTAINERS MAY BE RECYCLED. ANY LIQUID PRODUCT SHOULD BE MANAGED AS A HAZARDOUS WASTE.

ALL DISPOSAL ACTIVITIES MUST COMPLY WITH FEDERAL, STATE, PROVINCIAL AND LOCAL REGULATIONS. LOCAL REGULATIONS MAY BE MORE STRINGENT THAN STATE, PROVINCIAL OR NATIONAL REQUIREMENTS.

-----SECTION 14: TRANSPORT INFORMATION -----

US DOT (GROUND): CONSUMER COMMODITY, ORM-D

ICAO/IATA (AIR): CONSUMER COMMODITY, ID8000, 9

ORDER NO: 0968364 RELEASE NO: 001 MSDS NO: 005911

BARNES DISTRIBUTION

IMO/IMDG (WATER): AEROSOLS, UN1950, 2.2, LIMITED QUANTITY

SPECIAL PROVISIONS: NONE

-----SECTION 15: REGULATORY INFORMATION -----

U.S. FEDERAL REGULATIONS:

TOXIC SUBSTANCES CONTROL ACT (TSCA):

ALL INGREDIENTS ARE EITHER LISTED ON THE TSCA INVENTORY OR ARE EXEMPT.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):

REPORTABLE QUANTITIES (RQ'S) EXIST FOR THE FOLLOWING INGREDIENTS:

TETRACHLOROETHYLENE (100 LBS)

SPILLS OR RELEASES RESULTING IN THE LOSS OF ANY INGREDIENT AT OR ABOVE ITS RQ REQUIRE IMMEDIATE NOTIFICATION TO THE NATIONAL RESPONSE CENTER (800-424-8802) AND TO YOUR LOCAL EMERGENCY PLANNING COMMITTEE.

SUPERFUND AMENDMENTS REAUTHORIZATION ACT (SARA) TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS): NONE

SECTION 311/312 HAZARD CATEGORIES:

FIRE HAZARD: NO

REACTIVE HAZARD: NO

RELEASE OF PRESSURE: YES

ACUTE HEALTH HAZARD: YES

CHRONIC HEALTH HAZARD: YES

SECTION 313 TOXIC CHEMICALS:

THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

TETRACHLOROETHYLENE (97.7%)

CLEAN AIR ACT:

SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPS): TETRACHLOROETHYLENE

U.S. STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROP 65):

THIS PRODUCT MAY CONTAIN THE FOLLOWING CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM:
TETRACHLOROETHYLENE

CONSUMER PRODUCTS VOC REGULATIONS:

ORDER NO: 0968364 RELEASE NO: 001 MSDS NO: 005911

BARNES DISTRIBUTION

THIS PRODUCT CANNOT BE SOLD FOR USE IN CALIFORNIA AND NEW JERSEY. IN OTHER STATES WITH CONSUMER PRODUCTS VOC REGULATIONS, THIS PRODUCT IS COMPLIANT AS A BRAKE CLEANER.

STATE RIGHT TO KNOW:

NEW JERSEY: 127-18-4, 124-38-9
PENNSYLVANIA: 127-18-4, 124-38-9
MASSACHUSETTS: 127-18-4, 124-38-9
RHODE ISLAND: 127-18-4, 124-38-9

CANADIAN REGULATIONS:

CANADIAN DSL INVENTORY:

ALL INGREDIENTS ARE EITHER LISTED ON THE DSL INVENTORY OR ARE EXEMPT.

WHMIS HAZARD CLASS: A, D1B, D2A, D2B

EUROPEAN UNION REGULATIONS:

ROHS COMPLIANCE:

THIS PRODUCT IS COMPLIANT WITH DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 27 JANUARY 2003. THIS PRODUCT DOES NOT CONTAIN ANY OF THE RESTRICTED SUBSTANCES AS LISTED IN ARTICLE 4(1) OF THE ROHS DIRECTIVE.

ADDITIONAL REGULATORY INFORMATION: NONE

-----SECTION 16: OTHER INFORMATION -----

HMIS(R*) (II):

HEALTH 2
FLAMMABILITY 0
REACTIVITY 0
PPE B

NFPA:

2
0
0

RATINGS RANGE FROM 0 (NO HAZARD) TO 4 (SEVERE HAZARD)

REVISION DATE: 05/07/2009

CHANGES SINCE LAST REVISION:

SECTION 1: PRODUCT USE REVISED

THE INFORMATION CONTAINED IN THIS DOCUMENT APPLIES TO THIS SPECIFIC MATERIAL AS SUPPLIED. IT MAY NOT BE VALID FOR THIS MATERIAL IF IT IS USED IN COMBINATION WITH ANY OTHER MATERIALS. THIS INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE OR OBTAINED FROM SOURCES BELIEVED TO BE ACCURATE. BEFORE USING ANY PRODUCT, READ ALL WARNINGS AND DIRECTIONS ON THE LABEL.

B A R N E S D I S T R I B U T I O N

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
CAS: CHEMICAL ABSTRACT SERVICE
CFR: CODE OF FEDERAL REGULATIONS
DOT: DEPARTMENT OF TRANSPORTATION
DSL: DOMESTIC SUBSTANCE LIST
G/L: GRAMS PER LITER
HMIS: HAZARDOUS MATERIALS IDENTIFICATION SYSTEM
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IATA: INTERNATIONAL AIR TRANSPORT ASSOCIATION
ICAO: INTERNATIONAL CIVIL AVIATION ORGANIZATION
IMDG: INTERNATIONAL MARITIME DANGEROUS GOODS
IMO: INTERNATIONAL MARITIME ORGANIZATION
LBS./GAL: POUNDS PER GALLON
LC: LETHAL CONCENTRATION
LD: LETHAL DOSE
NA: NOT APPLICABLE
ND: NOT DETERMINED
NIOSH: NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY & HEALTH
NFPA: NATIONAL FIRE PROTECTION ASSOCIATION
NTP: NATIONAL TOXICOLOGY PROGRAM
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PMCC: PENSKEY-MARTENS CLOSED CUP
PPE: PERSONAL PROTECTION EQUIPMENT
PPM: PARTS PER MILLION
ROHS: RESTRICTION OF HAZARDOUS SUBSTANCES
STEL: SHORT TERM EXPOSURE LIMIT

ORDER NO: 0968364 RELEASE NO: 001 MSDS NO: 005911

BARNES DISTRIBUTION

TCC: TAG CLOSED CUP

TWA: TIME WEIGHTED AVERAGE

WHMIS: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

CTRL#: 09719/00491G

ORDER NO: 6311000 RELEASE NO: 001 MSDS NO: 008791

BARNES DISTRIBUTION

Synonyms: BD1493 BD1493-1
MSDS DOCUMENT

PRODUCT:
PRIVATE LABEL: BARNES L/V BLACK GM SPEC SILICONE

PRINT REV. DATE: 02/20/2013

-----1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

TRADE NAME OF THIS PRODUCT:
PRIVATE LABEL: BARNES L/V BLACK GM SPEC SILICONE

MSDS ID: BD1493, BD1493-1

MANUFACTURER:
DYNATEX INC.
350 RING ROAD
ELIZABETHTOWN, KY 42701
PHONE NUMBER: (270) 769-3385

EMERGENCY PHONE:
CHEMTREC: (800) 424-9300

REVISION DATE: 2/20/2013

NFPA:
HEALTH 2
FIRE 1
REACTIVITY 0
SPECIFIC

-----2. COMPOSITION AND INFORMATION ON INGREDIENTS -----

INGREDIENT	CAS NUMBER	WEIGHT %	ACGIH TLV	PEL	STEL
AMORPHOUS SILICA	7631-86-9	11%	10 MG/M3	6 MG/M3	NOT EST.
METHYL OXIMINO SILANE	22984-54-9	6%			
DI (ETHYLMETHYLKETOXIME) METHOXYMETHYL SILANE	83817-72-5	2%			
N-BETA-(AMINOETHYL)- GAMMA-AMINOPROPYLTRIMET HOXSILANE	1760-24-3	2%			
ANTIMONY CHROMIUM MANGANESE TITANIUM BROWN RUTILE	69991-68-0	0.2%			

BARNES DISTRIBUTION

-----3. HAZARD IDENTIFICATION -----

EYE CONTACT: UNCURED PRODUCT CONTACT MAY IRRITATE EYES.

SKIN CONTACT:
UNCURED PRODUCT CONTACT WILL IRRITATE LIPS, GUMS, TONGUE AND SKIN.

INHALATION:
CAUSES MILD RESPIRATORY IRRITATION. APPLIES ONLY IN UNCURED STATE.

INGESTION: MAY CAUSE GASTRIC DISTRESS.

OTHER: ACETIC ACID RELEASED DURING CURING.

SYMPTOMS OF OVEREXPOSURE: NO KNOWN APPLICABLE INFORMATION.

EXISTING CONDITIONS AGGRAVATED BY EXPOSURE:
NO KNOWN APPLICABLE INFORMATION.

CAUTION:
WEARERS OF CONTACT LENSES MUST NOT HANDLE LENSES UNTIL ALL SEALANT HAS BEEN
CLEANED FROM FINGERTIPS; RESIDUAL SILICONE WILL TRANSFER TO LENSES AND CAUSE
SEVERE EYE IRRITATION.

-----4. FIRST AID INFORMATION -----

EYE CONTACT:
IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. SEEK MEDICAL ATTENTION.

SKIN CONTACT:
REMOVE FROM SKIN AND WASH THOROUGHLY WITH SOAP AND WATER OR WATERLESS
CLEANSER. GET MEDICAL ATTENTION IF IRRITATION OR OTHER ILL EFFECTS DEVELOP OR
PERSIST.

INHALATION: REMOVE TO FRESH AIR. NO FIRST AID SHOULD BE NEEDED.

INGESTION: NO FIRST AID SHOULD BE NEEDED.

COMMENTS: TREAT ACCORDING TO PERSON'S CONDITION AND SPECIFICS OF EXPOSURE.

-----5. FIRE FIGHTING MEASURES -----

FLASH POINT: NOT APPLICABLE

AUTO-IGNITION TEMPERATURE: NOT DETERMINED

FLAMMABILITY LIMITS IN AIR: NOT DETERMINED

EXTINGUISHING MEDIA:

BARNES DISTRIBUTION

CARBON DIOXIDE, DRY CHEMICAL, FOAM, WATER, WATER FOG OR SPRAY

SPECIAL FIRE FIGHTING PROCEDURES:

SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN WHEN FIGHTING LARGE FIRES INVOLVING CHEMICALS. DETERMINE THE NEED TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. USE WATER SPRAY TO KEEP FIRE EXPOSED CONTAINERS COOL.

UNUSUAL FIRE OR EXPLOSION HAZARDS: NONE KNOWN

HAZARDOUS DECOMPOSITION PRODUCTS:

THERMAL BREAKDOWN OF THIS PRODUCT DURING FIRE OR VERY HIGH HEAT CONDITIONS MAY EVOLVE THE FOLLOWING HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON OXIDES AND TRACES OF INCOMPLETELY BURNED CARBON COMPOUNDS

FORMALDEHYDE

SILICON DIOXIDE

SULFUR OXIDES

IODINE COMPOUNDS

-----6. ACCIDENTAL RELEASE MEASURES -----

STEPS TO BE TAKEN IN CASE OF SPILL OR RELEASE:

DETERMINE WHETHER TO EVACUATE OR ISOLATE THE AREA ACCORDING TO YOUR LOCAL EMERGENCY PLAN. OBSERVE ALL PERSONAL PROTECTION EQUIPMENT RECOMMENDATIONS DESCRIBED IN SECTIONS 5 AND 8. FOR LARGE SPILLS, PROVIDE DIKING OR OTHER APPROPRIATE CONTAINMENT TO KEEP MATERIAL FROM SPREADING. IF DIKED MATERIAL CAN BE PUMPED, STORE RECOVERED MATERIAL IN APPROPRIATE CONTAINER. FOR SMALL SPILLS, WIPE UP OR SCRAPE UP AND CONTAIN FOR SALVAGE OR DISPOSAL. CLEAN AREA AS APPROPRIATE SINCE SPILLED MATERIAL, EVEN IN SMALL QUANTITIES, MAY PRESENT A SLIP HAZARD. FINAL CLEANING MAY REQUIRE THE USE OF STEAM, SOLVENTS OR DETERGENTS. DISPOSE OF SATURATED ABSORBENT OR CLEANING MATERIALS APPROPRIATELY, SINCE SPONTANEOUS HEATING MAY OCCUR.

LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS MAY APPLY TO RELEASES AND DISPOSAL OF THIS MATERIAL, AS WELL AS THOSE MATERIALS AND ITEMS EMPLOYED IN THE CLEANUP OF RELEASES. YOU WILL NEED TO DETERMINE WHICH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS ARE APPLICABLE. SECTIONS 13 AND 15 OF THIS MSDS PROVIDE INFORMATION REGARDING CERTAIN FEDERAL AND STATE REQUIREMENTS.

-----7. HANDLING AND STORAGE -----

HANDLING:

AVOID EYE CONTACT. AVOID SKIN CONTACT. AVOID BREATHING VAPOR. KEEP CONTAINER CLOSED. DO NOT TAKE INTERNALLY. USE REASONABLE CARE.

STORAGE:

KEEP CONTAINER CLOSED AND STORE IN A COOL, WELL VENTILATED AREA, AWAY FROM WATER OR MOISTURE.

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-----8. EXPOSURE CONTROLS AND PERSONAL PROTECTION -----

EXPOSURE CONTROLS:

ACETIC ACID IS FORMED UPON CONTACT WITH WATER OR HUMID AIR. PROVIDE ADEQUATE VENTILATION TO CONTROL EXPOSURES WITHIN GUIDELINES OF

OSHA PEL:
TWA: 10 PPM AND

ACGIH TLV:
TWA: 10 PPM
STEL: 15 PPM

EYE PROTECTION: SAFETY GOGGLES OR GLASSES WITH SIDE SHIELDS ARE RECOMMENDED.

SKIN PROTECTION:

WASH AT MEALTIMES AND END OF SHIFT. CONTAMINATED CLOTHING AND SHOES SHOULD BE REMOVED AS SOON AS PRACTICAL AND THOROUGHLY CLEANED BEFORE REUSE. CHEMICAL PROTECTIVE GLOVES ARE RECOMMENDED.

SUITABLE GLOVES: SILVER SHIELD(R*) 4H(R*)

RESPIRATORY PROTECTION:

NO RESPIRATORY PROTECTION SHOULD BE NEEDED WITH GOOD LOCAL VENTILATION.

PRECAUTIONARY MEASURES:

AVOID EYE CONTACT. AVOID SKIN CONTACT. AVOID BREATHING VAPOR. KEEP CONTAINER CLOSED. DO NOT TAKE INTERNALLY. USE REASONABLE CARE.

NOTE:

THESE PRECAUTIONS ARE FOR ROOM TEMPERATURE HANDLING. USE AT ELEVATED TEMPERATURES OR AEROSOL/SPRAY APPLICATIONS MAY REQUIRE ADDED PRECAUTIONS. FOR FURTHER INFORMATION REGARDING AEROSOL INHALATION TOXICITY, PLEASE REFER TO THE GUIDANCE DOCUMENT REGARDING THE USE OF SILICONE-BASED MATERIALS IN AEROSOL APPLICATIONS THAT HAS BEEN DEVELOPED BY THE SILICONE INDUSTRY (WWW.SEHSC.COM).

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: PASTE

SPECIFIC GRAVITY: 1.04

COLOR/APPEARANCE: BLACK

ODOR: SLIGHT MEDICINAL

pH: NOT APPLICABLE

BOILING/COND. POINT: NOT APPLICABLE

MELTING/FREEZING POINT: NOT DETERMINED

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SOLUBILITY: NONE IN WATER

VOC %: 30 G/L

PERCENT VOLATILE: NOT APPLICABLE

VISCOSITY: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

NOTE:

THE ABOVE INFORMATION IS NOT INTENDED FOR USE IN PREPARING PRODUCT SPECIFICATIONS. CONTACT ACCUMETRIC LLC BEFORE WRITING SPECIFICATIONS.

-----10. STABILITY AND REACTIVITY -----

CONDITIONS TO AVOID: EXPOSURE TO AIR OR MOISTURE UNTIL READY TO USE.

MATERIALS TO AVOID / INCOMPATIBILITY:

OXIDIZING MATERIAL CAN CAUSE A REACTION. WATER, MOISTURE OR HUMID AIR CAN CAUSE HAZARDOUS VAPORS TO FORM.

CHEMICAL STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

-----11. TOXICOLOGICAL INFORMATION -----

-----12. ECOLOGICAL INFORMATION -----

ENVIRONMENTAL FATE AND DISTRIBUTION:

COMPLETE INFORMATION IS NOT YET AVAILABLE.

ENVIRONMENTAL EFFECTS: COMPLETE INFORMATION IS NOT YET AVAILABLE.

FATE AND EFFECTS IN WASTE WATER TREATMENT PLANTS:

COMPLETE INFORMATION IS NOT YET AVAILABLE.

-----13. DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:

WE MAKE NO GUARANTEE OR WARRANTY OF ANY KIND THAT THE USE OR DISPOSAL OF THIS PRODUCT COMPLIES WITH ALL LOCAL, STATE, OR FEDERAL LAWS. IT IS ALSO THE OBLIGATION OF EACH USER OF THE PRODUCT MENTIONED HEREIN TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE STATUTES.

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BARNES DISTRIBUTION

THIS PRODUCT IS NOT KNOWN TO BE REGULATED UNDER RCRA REGULATIONS. DISPOSAL OF UNUSED PORTIONS OF THIS PRODUCT AND PROCESS WASTE CONTAINING THIS PRODUCT SHOULD BE DONE ONLY AFTER A CAREFUL EVALUATION AND IN COMPLIANCE WITH ALL FEDERAL, LOCAL AND STATE LAWS.

-----14. TRANSPORTATION INFORMATION -----

DOT ROAD SHIPMENT INFORMATION: NOT SUBJECT TO DOT.

OCEAN SHIPMENT (IMDG): NOT SUBJECT TO IMDG CODE.

AIR SHIPMENT (IATA): NOT SUBJECT TO IATA REGULATIONS.

-----15. REGULATORY INFORMATION -----

THE CONTENTS OF THIS MSDS COMPLY WITH THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200.

TSCA STATUS:

ALL CHEMICAL SUBSTANCES FOUND IN THIS PRODUCT COMPLY WITH THE TOXIC SUBSTANCES CONTROL ACT INVENTORY REPORTING REQUIREMENTS.

CALIFORNIA PROPOSITION 65:

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED BY THE STATE OF CALIFORNIA UNDER THE SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (PROPOSITION 65) AS BEING KNOWN TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: NONE KNOWN

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: NONE

SARA TITLE III SECTION 304 CERCLA HAZARDOUS SUBSTANCES: NONE

SARA TITLE III SECTION 312 HAZARD CLASS:

ACUTE: YES
CHRONIC: YES
FIRE: NO
PRESSURE: NO
REACTIVE: NO

SARA TITLE III SECTION 313 TOXIC CHEMICALS: ALUMINUM (7429-90-5)

PENNSYLVANIA:

SILICA, AMORPHOUS (7631-86-9)
ALUMINUM (7429-90-5)
ANTIMONY CHROMIUM MANGANESE TITANIUM BROWN RUTILE (69991-68-0)
BARIUM SULFATE (7727-43-7)
BLACK IRON OXIDE (1317-61-9)
C.I. PIGMENT BLUE 29 (57455-37-5)
IRON OXIDE (1309-37-1)
TITANIUM DIOXIDE (13463-67-7)

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YELLOW IRON OXIDE (51274-00-1)
CADMIUM SULFIDE (1306-23-6)

NEW JERSEY:

ETHYLTRIAACETOXYSILANE (17689-77-9)
METHYLTRIAACETOXYSILANE (4253-34-3)
SILICA, AMORPHOUS (7631-86-9)
ALUMINUM (7429-90-5)
ANTIMONY CHROMIUM MANGANESE TITANIUM BROWN RUTILE (6991-68-0)
BARIUM SULFATE (7727-43-7)
BLACK IRON OXIDE (1317-61-9)
IRON OXIDE (1309-37-1)
TITANIUM DIOXIDE (13463-67-7)
CADMIUM SULFIDE (1306-23-6)
CHROMIC OXIDE (1308-38-9)

-----16. OTHER INFORMATION -----

DISCLAIMER:

THE DATA CONTAINED HEREIN IS BASED UPON INFORMATION THAT ACCUMETRIC LLC BELIEVES TO BE RELIABLE. USERS OF THIS PRODUCT HAVE THE RESPONSIBILITY TO DETERMINE THAT SUITABILITY OF USE AND TO ADOPT ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY AND PROTECTION OF PROPERTY AND PERSONS INVOLVED IN SAID USE. ALL STATEMENTS TO SUGGESTIONS ARE MADE WITHOUT WARRANTY, EXPRESSED OR IMPLIED, REGARDING THE ACCURACY OF THE INFORMATION, THE HAZARDS CONNECTED WITH THE USE OF THE MATERIAL OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

ORDER NO: 2306480 RELEASE NO: 001 MSDS NO: 009511

BARNES DISTRIBUTION

Synonyms: 20050
MATERIAL SAFETY DATA SHEET

GROUP 31 INCORPORATED

PRODUCT NAME: CHEMICAL VULCANIZING CEMENT

XOTRAN(R*) SEAL

-----SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: CHEMICAL VULCANIZING CEMENT

PART NUMBER(S): 14-004, 14-008, 14-032, 14-511, 14-512

GENERAL USE: CHEMICAL OR HEAT VULCANIZATION OF TIRE REPAIR MATERIALS

PRODUCT DESCRIPTION: LIQUID WITH SOLVENT ODOR THAT IS CLOUDY OR BLUE IN COLOR

MANUFACTURER'S NAME: 31 INCORPORATED

STREET ADDRESS: 100 ENTERPRISE DRIVE

CITY, STATE, ZIP, COUNTRY: NEWCOMERSTOWN, OH 43832 USA

DATE PREPARED: JAN. 1, 2010

SUPERSEDES: MAY 19, 2009

FOR INFORMATION, CONTACT: (740) 498-8324; INFO@31INC.COM

EMERGENCY TELEPHONE NUMBER:

CHEM - TEL: (800) 255-3924 OR (813) 248-0585

-----SECTION 2 - HAZARDOUS INGREDIENTS -----

HAZARDOUS COMPONENTS	% (BY WEIGHT)	CAS#	TLV UNITS	HAZARD SYMBOL	RISK PHRASES (FULL TEXT SECTION 16)
HEPTANE	80-90	142-82-5	400 PPM	N/A	
METHYLCYCLOHEXANE	0.5	108-87-2	400 PPM	N/A	
UNCURED NATURAL RUBBER	10-15	N/A			

-----SECTION 3 - HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:

CONTACT WITH EYES WILL CAUSE IRRITATION. CONTACT WITH SKIN MAY CAUSE

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IRRITATION.

ACUTE EFFECTS OF OVEREXPOSURE:

INHALATION: MAY CAUSE DIZZINESS

SKIN: MAY CAUSE IRRITATION UPON PROLONGED OR REPEATED CONTACT

EYES: MAY CAUSE EYE IRRITATION.

INGESTION: MAY CAUSE IRRITATION OF GASTROINTESTINAL TRACT.

CHRONIC EFFECTS OF OVEREXPOSURE: N/A

OTHER HEALTH HAZARDS: N/A

-----SECTION 4 - FIRST AID MEASURES -----

INHALATION:

IF DIFFICULTY BREATHING, DIZZINESS, OR LIGHTHEADEDNESS IS EXPERIENCED, REMOVE VICTIM TO FRESH AIR.

IF CONTINUED BREATHING DIFFICULTIES OCCUR, ADMINISTER OXYGEN AND SEEK IMMEDIATE MEDICAL ATTENTION.

SKIN:

WASH WITH SOAP AND LARGE QUANTITIES OF WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

EYES:

FLUSH WITH LARGE QUANTITIES OF CLEAN WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION.

INGESTION:

DO NOT GIVE ANYTHING BY MOUTH OR INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ATTENTION.

-----SECTION 5 - FIRE FIGHTING MEASURES -----

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL, FIRE FIGHTING APPARATUS

FIRE FIGHTING PROCEDURES:

USE OF SELF CONTAINED BREATHING APPARATUS IS RECOMMENDED FOR FIRE FIGHTERS

UNUSUAL FIRE AND EXPLOSION HAZARDS:

EXTREMELY FLAMMABLE AND MAY BE IGNITED BY HEAT, SPARKS, FLAME, OR OTHER SOURCE OF IGNITION. CLOSED CONTAINERS CAN EXPLODE DUE TO BUILDUP OF PRESSURE WHEN EXPOSED TO EXTREME HEAT.

-----SECTION 6 - ACCIDENTAL RELEASE MEASURES -----

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

COMBUSTIBLE:

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EVACUATE AND VENTILATE AREA; REMOVE ALL SOURCES OF SPARKS, IGNITION, AND OPEN FLAMES; CONFINE AND ABSORB INTO APPROVED ABSORBENT; PLACE MATERIAL INTO APPROVED CONTAINERS FOR DISPOSAL FOLLOWING ALL LOCAL, STATE, AND FEDERAL REGULATIONS; DO NOT WASH TO SEWER OR WATERWAY.

NOTE: SMALL AMOUNTS MAY BE TAKEN UP WITH INERT MATERIAL.

-----SECTION 7 - HANDLING AND STORAGE -----

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
THIS MATERIAL IS COMBUSTIBLE. IT SHOULD BE STORED IN TIGHTLY CLOSED CONTAINERS IN A COOL, WELL VENTILATED AREA. VAPORS MAY FORM EXPLOSIVE MIXTURES IN AIR. ALL SOURCES OF IGNITION SHOULD BE CONTROLLED. KEEP THIS AND OTHER CHEMICALS OUT OF REACH OF CHILDREN.

AVOID INHALING CONCENTRATED FUMES OR VAPORS.

-----SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION -----

HAZARDOUS COMPONENTS	NIOSH				ACGIH			
	TWA PPM	TWA MG/M3	STEL PPM	STEL MG/M3	TWA PPM	TWA MG/M3	STEL PPM	STEL MG/M3
HEPTANE								
METHYLCYCLOHEXANE								
UNCURED NATURAL RUBBER								

PERSONAL PROTECTION:

RESPIRATORY PROTECTION:
USE NIOSH APPROVED CARTRIDGE OR GAS MASK.

REFER TO 29 CFR 1910.134 OR EUROPEAN STANDARD EN 149 FOR COMPLETE REGULATIONS.

VENTILATION:
MECHANICAL VENTILATION TO KEEP PRODUCT WITHIN SPECIFIED TLV RANGES.

PROTECTIVE GLOVES: IMPERABLE GLOVES ADVISED.

EYE PROTECTION:
PROTECTIVE EYEGLASSES OR CHEMICAL SAFETY GOGGLES.
REFER TO 29 CFR 1910.133 OR EUROPEAN STANDARD EN 166.

OTHER: WORK CLOTHES

WORK / HYGIENIC PRACTICES:
PRACTICE SAFE WORKPLACE HABITS. MINIMIZE BODY CONTACT WITH THIS PRODUCT.

-----SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES -----

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APPEARANCE AND ODOR:

LIQUID WITH SOLVENT ODOR THAT IS CLOUDY OR BLUE IN COLOR

BOILING POINT/RANGE: 200 DEG. - 209 DEG. F (93.3 DEG. - 98.3 DEG. C)

FREEZING POINT: N/A

FLASH POINT (TEST METHODS): 32 DEG. F, 0 DEG. C (TCC)

FLAMMABLE LIMITS IN AIR (% BY VOLUME):

LOWER: 1.0

UPPER: 7.0

EVAPORATION RATE: 4.50

VAPOR PRESSURE AT 20 DEG. C: N/A

SPECIFIC GRAVITY: 0.77

SOLUBILITY IN WATER (% BY WEIGHT): N/A

V.O.C.: 75% - 85%

VAPOR DENSITY: N/A

-----SECTION 10 - STABILITY AND REACTIVITY -----

STABILITY:

UNSTABLE ()

STABLE (XXX)

CONDITIONS TO AVOID: N/A

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG ACIDS OR BASES AND SELECTED AMINES.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:

THERMAL DECOMPOSITION IN THE PRESENCE OF AIR MAY YIELD CARBON MONOXIDE AND/OR CARBON DIOXIDE.

HAZARDOUS POLYMERIZATION:

MAY OCCUR ()

WILL NOT OCCUR (XXX)

CONDITIONS TO AVOID: N/A

-----SECTION 11 - TOXICOLOGICAL INFORMATION -----

HAZARDOUS COMPONENTS	CAS#	LD50 OF INGREDIENT	LC50 OF INGREDIENT
	EINECS#	(SPECIFY SPECIES AND ROUTE)	(SPECIFY SPECIES)

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HEPTANE 142-82-5
METHYLCYCLOHEXANE 108-87-2
UNCURED NATURAL RUBBER N/A

-----SECTION 12 - ECOLOGICAL INFORMATION -----

NO DATA ARE AVAILABLE ON THE ADVERSE EFFECTS OF THIS MATERIAL ON THE ENVIRONMENT. NEITHER COD NOR BOD DATA ARE AVAILABLE.

BASED ON THE CHEMICAL COMPOSITION OF THIS PRODUCT, IT IS ASSUMED THAT THE MIXTURE CAN BE TREATED IN AN ACCLIMATIZED BIOLOGICAL WASTE TREATMENT PLANT SYSTEM IN LIMITED QUANTITIES. HOWEVER, SUCH TREATMENT SHOULD BE EVALUATED AND APPROVED FOR EACH SPECIFIC BIOLOGICAL SYSTEM. NONE OF THE INGREDIENTS IN THIS MIXTURE ARE CLASSIFIED AS A MARINE POLLUTANT.

-----SECTION 13 - DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. THIS PRODUCT MAY PRODUCE HAZARDOUS VAPORS OR FUMES IN A CLOSED DISPOSAL CONTAINER CREATING A DANGEROUS ENVIRONMENT. REFER TO "40 CFR PROTECTION OF ENVIRONMENT PARTS 260 - 299" FOR COMPLETE WASTE DISPOSAL REGULATIONS. CONSULT YOUR LOCAL, STATE, OR FEDERAL ENVIRONMENTAL PROTECTION AGENCY (EPA) BEFORE DISPOSING OF ANY CHEMICALS. DO NOT FLUSH TO SANITARY SEWER OR WATERWAY.

-----SECTION 14 - TRANSPORT INFORMATION -----

PROPER SHIPPING NAME: HEPTANES

DOT HAZARD CLASS / PACK GROUP: 3 PG II

REFERENCE:

UN / NA IDENTIFICATION NUMBER: UN 1206

LABEL: FLAMMABLE

HAZARD SYMBOLS:

IATA HAZARD CLASS/PACK GROUP: 3 PG II

IMDG HAZARD CLASS: 3 PG II

RID/ADR DANGEROUS GOODS CODE:

UN TDG CLASS / PACK GROUP:

B A R N E S D I S T R I B U T I O N

NOTE:

TRANSPORTATION INFORMATION IF FOR REFERENCE ONLY. CLIENT IS URGED TO CONSULT CFR 49 PARTS 100 - 177, IMDG, IATA, EU, UNITED NATIONS TDG, AND WHMIS (CANADA) TDG INFORMATION MANUALS FOR DETAILED REGULATIONS AND EXCEPTIONS COVERING SPECIFIC CONTAINER SIZES, PACKAGING MATERIALS, AND METHODS OF SHIPPING.

-----SECTION 15 - REGULATORY INFORMATION -----

TSCA (USA - TOXIC SUBSTANCE CONTROL ACT):

ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE U.S. TOXIC SUBSTANCE CONTROL ACT CHEMICAL INVENTORY (TSCA INVENTORY) OR ARE EXEMPTED FROM LISTING BECAUSE A LOW VOLUME EXEMPTION HAS BEEN GRANTED IN ACCORDANCE WITH 40 CFR 723.50.

SARA TITLE III (USA - SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES: IMMEDIATE HEALTH

313 REPORTABLE INGREDIENTS: NONE

CERCLA (USA - COMPREHENSIVE RESPONSE COMPENSATION AND LIABILITY ACT): NONE

CPR (CANADIAN CONTROLLED PRODUCTS REGULATIONS):

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CONTROLLED PRODUCTS REGULATIONS.

IDL (CANADIAN INGREDIENT DISCLOSURE LIST):

COMPONENTS OF THIS PRODUCT IDENTIFIED BY CAS NUMBER ARE LISTED ON THE CANADIAN INGREDIENT DISCLOSURE LIST ARE SHOWN IN SECTION 2.

DSL / NDSL (CANADIAN DOMESTIC SUBSTANCES LIST / NON-DOMESTIC SUBSTANCES LIST):

COMPONENTS OF THIS PRODUCT IDENTIFIED BY CAS NUMBER ARE LISTED ON THE DSL OR NDSL AND MAY OR MAY NOT BE LISTED IN SECTION 2 OF THIS DOCUMENT. ONLY INGREDIENTS CLASSIFIED AS "HAZARDOUS" ARE LISTED IN SECTION 2 UNLESS OTHERWISE INDICATED.

EINECS (EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES):

COMPONENTS OF THIS PRODUCT IDENTIFIED BY CAS NUMBERS ARE ON THE EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES.

RISK PHRASES:

R36/38: IRRITATING TO EYES AND SKIN

SYMBOL(S) REQUIRED FOR LABEL:

FLAMMABLE
IRRITANT

SAFETY PHRASES:

S2: KEEP OUT OF REACH OF CHILDREN

S41: IN CASE OF FIRE AND/OR EXPLOSION DO NOT BREATHE FUMES.

ORDER NO: 2306480 RELEASE NO: 001 MSDS NO: 009511

BARNES DISTRIBUTION

-----SECTION 16 - OTHER INFORMATION -----

NOTES & FULL R-PHRASE TEXT:

R36/38: IRRITATING TO EYES AND SKIN

HMS HAZARD RATINGS:

HEALTH	1
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTIVE EQUIPMENT	A

REVISION SUMMARY:

MSDS PREPARED BY:

CHARLES MUHS, TECHNICAL ADVISOR

31 INCORPORATED

100 ENTERPRISE DR.

NEWCOMERSTOWN, OH 43832

(740) 498-8324

CHUCK@31INC.COM

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. VENDOR ASSUMES NO RESPONSIBILITY FOR INJURY TO VENDEE OR THIRD PERSONS PROXIMATELY CAUSED BY THE MATERIALS IF REASONABLE SAFETY PROCEDURES ARE NOT ADHERED TO AS STIPULATED IN THE DATA SHEET.

ADDITIONALLY, VENDOR ASSUMES NO RESPONSIBILITY FOR INJURY TO VENDEE OR THIRD PERSON PROXIMATELY CAUSED BY ABNORMAL USE OF THE MATERIAL, EVEN IF REASONABLE SAFETY PROCEDURES ARE FOLLOWED. FURTHERMORE, VENDEE ASSUMES THE RISK IN HIS USE OF THE MATERIAL.

ORDER NO: 2590566 RELEASE NO: 001 MSDS NO: 009621

BARNES DISTRIBUTION

Synonyms: 21990 21991
PACER(R*)
TECHNOLOGY

MATERIAL SAFETY DATA SHEET

MSDS NO: FSA ADHESIVE - BARNES

REVISION NO: 2

DATE ISSUED: 05/27/2010

DATE-REVISED: 05/27/2010

-----1. PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT DESCRIPTION: RX-100 ADHESIVE

PRODUCT CODE: ETHYL CYANOACRYLATE

MANUFACTURER:
PACER TECHNOLOGY
9420 SANTA ANITA AVENUE
RANCHO CUCAMONGA, CA 91730-6117

EMERGENCY CONTACT: CHEMTREC

PRODUCT STEWARDSHIP: 800-424-9300

ALTERNATE EMERGENCY PHONE: 703-527-3887

SERVICE NUMBER: 909-987-0550

ALTERNATE CUSTOMER SERVICE: 800-538-3091

-----2. HAZARDS IDENTIFICATION -----

HAZARD DESIGNATION:
"Xi" - IRRITANT

EMERGENCY OVERVIEW:
PHYSICAL APPEARANCE: CLEAR, COLORLESS LIQUID

IMMEDIATE CONCERNS:
R36/37/38: IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

POTENTIAL HEALTH EFFECTS:

EYES:
R36: IRRITATING TO EYES.

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BARNES DISTRIBUTION

SKIN: MAY CAUSE SKIN IRRITATION. ALLERGIC REACTIONS ARE POSSIBLE.

INGESTION:

ADHESIVE BECOMES SOLID IN CONTACT WITH SALIVA AND MAY ADHERE TO INSIDE OF MOUTH. SALIVA WILL LIFT ADHESIVE IN 1-2 DAYS. NOT A TOXIC PRODUCT.

INHALATION:

R37: IRRITATING TO RESPIRATORY SYSTEM.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

EYES: CAUSES EYE IRRITATION.

SKIN: SUBSTANCE CAUSES MODERATE SKIN IRRITATION.

SKIN ABSORPTION:

ADHESIVE BECOMES SOLID IN CONTACT WITH SALIVA AND MAY ADHERE TO INSIDE OF MOUTH. SALIVA WILL LIFT ADHESIVE IN 1-2 DAYS. NOT A TOXIC PRODUCT.

INGESTION:

WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.

INHALATION:

PROLONGED OR EXCESSIVE INHALATION MAY CAUSE RESPIRATORY TRACT IRRITATION.

ACUTE TOXICITY: AVOID EXPOSURE TO VAPOR CONCENTRATION IN CONFINED AREAS.

CHRONIC EFFECTS:

FREQUENT OR PROLONGED CONTACT MAY IRRITATE THE SKIN AND CAUSE A SKIN RASH (DERMATITIS).

MEDICAL CONDITIONS AGGRAVATED: NOT A LIKELY ROUTE OF EXPOSURE.

ROUTES OF ENTRY: INHALATION & INGESTION ARE MAJOR ROUTES OF ENTRY.

CANCER STATEMENT: NOT APPLICABLE.

IRRITANCY: IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.

SENSITIZATION: MAY CAUSE ALLERGIC SKIN REACTION.

-----3. COMPOSITION / INFORMATION ON INGREDIENTS -----

CHEMICAL NAME	WT. %	CAS	EINECS	CLASSIFICATION
ETHYL-2-CYANOACRYLATE	60-100	7085-85-0	230-391-5	Xi; R36/37/38
POLYMETHYL METHACRYLATE	10-30	9011-14-7	XXX-XXX-X	Xi; R36/37/38
HYDROQUINONE	0.5	123-31-9	204-617-8	Xn, N; R22, R40, R41, R43, R50, R68

BARNES DISTRIBUTION

(FULL TEXT OF R-PHRASES CAN BE FOUND UNDER HEADING 16)

---4. FIRST AID MEASURES -----

EYES:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION.

SKIN: WASH WITH SOAP AND WATER. PEEL OR ROLL SKIN APART.

INGESTION:

PEEL OR ROLL SKIN APART. ADHESIVE BECOMES SOLID IN CONTACT WITH SALIVA AND MAY ADHERE TO INSIDE OF MOUTH. SALIVA WILL LIFT ADHESIVE IN 1-2 DAYS. AVOID SWALLOWING SOLID ADHESIVE AFTER DETACHMENT. NOT A TOXIC PRODUCT.

INHALATION:

REMOVE TO FRESH AIR. PROLONGED OR REPEATED ELEVATED EXPOSURE MAY CAUSE ALLERGIC REACTIONS WITH ASTHMA LIKE SYMPTOMS IN SENSITIVE INDIVIDUALS.

-----5. FIRE FIGHTING MEASURES -----

FLASHPOINT AND METHOD: 85 DEG. C (185 DEG. F) CC - CLOSED CUP

GENERAL HAZARD:

COMBUSTIBLE LIQUID AND VAPOR. PRODUCT POLYMERIZED TO SOLID BY WATER.

EXTINGUISHING MEDIA:

USE DRY CHEMICAL EXTINGUISHER OR FLUSH WITH LARGE AMOUNTS OF WATER.

FIRE FIGHTING EQUIPMENT:

AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS PRESSURE-DEMAND, (MSHA/NIOSH APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR.

HAZARDOUS DECOMPOSITION PRODUCTS:

COMBUSTIBLE BY-PRODUCTS OF CARBON MONOXIDE/DIOXIDE.

-----6. ACCIDENTAL RELEASE MEASURES -----

SMALL SPILL:

POLYMERIZE WITH WATER. SOLID MATERIAL MAY BE SCRAPED FROM SURFACE.

LARGE SPILL:

POLYMERIZE WITH WATER. INCREASE VENTILATION TO AREA. SOLID MATERIAL MAY BE SCRAPED FROM SURFACE.

ENVIRONMENTAL PRECAUTIONS:

WATER SPILL: NONE KNOWN.

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-----7. HANDLING AND STORAGE -----

GENERAL PROCEDURES:

USE WITH ADEQUATE VENTILATION. AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

HANDLING:

AVOID BREATHING (DUST, VAPOR, MIST, GAS). AVOID CONTACT WITH SKIN, EYES AND CLOTHING. KEEP CONTAINER CLOSED WHEN NOT IN USE.

STORAGE:

STORE IN A COOL PLACE IN ORIGINAL CONTAINER AND PROTECT FROM SUNLIGHT. KEEP AWAY FROM SOURCES OF IGNITION.

STORAGE TEMPERATURE:

IDEAL STORAGE: 41-50F (5-10C)

SHELF LIFE:

ONE YEAR FROM THE DATE OF SHIPMENT FROM PACER TECHNOLOGY, EXCEPT FOR PACER NO-ODOR PRODUCT WHOSE SHELF LIFE IS 6 MONTHS, ONLY.

-----8. EXPOSURE CONTROLS / PERSONAL PROTECTION -----

ENGINEERING CONTROLS:

USE ONLY IN A WELL VENTILATED AREA. LOCAL EXHAUST VENTILATION MAY BE NECESSARY TO CONTROL ANY AIR CONTAMINANTS TO WITHIN THEIR TLVS DURING THE USE OF THIS PRODUCT.

PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE:

FOR NORMAL CONDITIONS, WEAR SAFETY GLASSES. WHERE THERE IS REASONABLE PROBABILITY OF LIQUID CONTACT, WEAR SPLASH-PROOF GOGGLES.

SKIN:

S36/37: WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES.

RESPIRATORY:

USE ONLY IN A WELL-VENTILATED AREA. IN CASE OF INSUFFICIENT VENTILATION, WEAR SUITABLE RESPIRATORY EQUIPMENT.

WORK HYGIENIC PRACTICES:

AVOID CONTACT WITH SKIN AND EYES. WASH THOROUGHLY AFTER HANDLING. AVOID CONTACT WITH CLOTHING AS CONTACT CAN CAUSE BURN.

OTHER USE PRECAUTIONS:

FACILITIES STORING OR UTILIZING THIS MATERIAL SHOULD BE EQUIPPED WITH AN EYEWASH FACILITY AND A SAFETY SHOWER.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: LIQUID

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BARNES DISTRIBUTION

ODOR: CHARACTERISTIC ODOR, INTENSELY IRRITATING.

APPEARANCE: TRANSPARENT, COLORLESS LIQUID.

PERCENT VOLATILE: <20 G/L

VAPOR PRESSURE: 1 MMHg @ 20C

VAPOR DENSITY: NOT ESTABLISHED

BOILING POINT: 185 DEG. C (365 DEG. F)

FLASHPOINT AND METHOD: 85 DEG. C (185 DEG. F) CC - CLOSED CUP

SOLUBILITY IN WATER: INSOLUBLE

EVAPORATION RATE: NOT ESTABLISHED

SPECIFIC GRAVITY: 1.060

VISCOSITY #1: 80 TO 120 CENTIPOISE AT 22 DEG. C (72 DEG. F)

(VOC): <20,000 G/L

-----10. STABILITY AND REACTIVITY -----

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

CONDITIONS TO AVOID:

AVOID TEMPERATURES ABOVE 176 DEG. F (80 DEG. C), MOISTURE AND ALKALINES.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON DIOXIDE, CARBON MONOXIDE AND OTHER TOXIC OR IRRITATING COMPOUNDS MAY FORM WHEN HEATED TO DECOMPOSITION. OXIDES OF NITROGEN AND PROBABLY HYDROGEN CYANIDE ARE ALSO POSSIBLE.

INCOMPATIBLE MATERIALS:

POLYMERIZED BY WATER, ALCOHOL, AMINES, ALKALINE MATERIALS AND DIRECT UV.

-----11. TOXICOLOGICAL INFORMATION -----

ACUTE:

ORAL LD50: ORAL LD50 = GREATER THAN 5000 MG/KG (ESTIMATED)

INHALATION LC50: VAPORS MAY BE IRRITATING.

RECOMMENDED TWA: 0.2 PPM.

BARNES DISTRIBUTION

EYE EFFECTS: BONDS SKIN AND EYES IN SECONDS. EYE IRRITANT.

SKIN EFFECTS:
IRK TATING TO SKIN. MAY CAUSE ALLERGIC SKIN REACTION WITH PROLONGED CONTACT.

SENSITIZATION: POSSIBLE SKIN SENSITIZER.

-----12. ECOLOGICAL INFORMATION -----

GENERAL COMMENTS: NONE KNOWN.

-----13. DISPOSAL CONSIDERATIONS -----

DISPOSAL METHOD:
POLYMERIZE WITH WATER TO A SOLID MATERIAL. DISPOSE OF AS SOLID WASTE OR TRASH
IN ACCORDANCE WITH LOCAL GOVERNMENT REGULATIONS OF THE REGION.

-----14. TRANSPORT INFORMATION -----

DOT (DEPARTMENT OF TRANSPORTATION):
PROPER SHIPPING NAME: NOT RESTRICTED

ROAD AND RAIL (ADR/RID):
PROPER SHIPPING NAME: NOT RESTRICTED

AIR (ICAO/IATA):
SHIPPING NAME: NOT RESTRICTED

VESSEL (IMO/IMDG):
SHIPPING NAME: NOT RESTRICTED

CANADA TRANSPORT OF DANGEROUS GOODS:
SHIPPING NAME: NOT RESTRICTED

-----15. REGULATORY INFORMATION -----

UNITED STATES:

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

EPCRA SECTION 313 SUPPLIER NOTIFICATION:

CHEMICAL NAME	WT. %	CAS
HYDROQUINONE	0.5	123-31-9

TU TSCA (TOXIC SUBSTANCE CONTROL ACT):
TSCA STATUS: ALL INGREDIENTS IN THIS MIXTURE ARE IN COMPLIANCE WITH TSCA.

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B A R N E S D I S T R I B U T I O N

HOWEVER, PACER TECHNOLOGY DOES NOT ASSUME ANY LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED HEREIN. FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE SOLE RESPONSIBILITY OF THE USER. ALL MATERIALS MAY PRESENT UNKNOWN HAZARDS AND SHOULD BE USED WITH CAUTION. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, WE CANNOT GUARANTEE THAT THESE ARE THE ONLY HAZARDS WHICH EXIST.

ORDER NO: 5204759 RELEASE NO: 001 MSDS NO: 010144

BARNES DISTRIBUTION

Synonyms: -21421-1 21421
MATERIAL SAFETY DATA SHEET

-----SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE -----
COMPANY/UNDERTAKING

SUBSTANCE: LUBRIPLATE NO. 105

MSDS NO.: 0892150034001

TRADE NAMES/SYNONYMS:

PRODUCT USE: PETROLEUM LUBRICATING GREASE

LUBRIPLATE(R*) LUBRICANTS CO.
129 LOCKWOOD ST.
NEWARK, NJ 07105

EMERGENCY TELEPHONE NUMBER: 1-800-255-3924-CHEM-TEL (24 HOUR)

TELEPHONE NUMBER FOR INFORMATION: 1-973-589-9150

CREATION DATE: 04/12/2007

REVISION DATE: 10/27/2011

-----SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS -----

COMPONENT: HEAVY HYDROTREATED NAPHTHENIC DISTILLATES (PETROLEUM)
CAS NUMBER: 64742-52-5
EC NUMBER (EINECS): 265-155-0
PERCENTAGE: 85-90

COMPONENT: FATTY ACID
CAS NUMBER: 8016-28-2
EC NUMBER (EINECS): 232-405-5
PERCENTAGE: 5-10

COMPONENT: ZINC OXIDE
CAS NUMBER: 1314-13-2
EC NUMBER (EINECS): 215-222-5
PERCENTAGE: 0-5

COMPONENT: CALCIUM HYDROXIDE
CAS NUMBER: 1305-62-0
EC NUMBER (EINECS): 215-137-3
PERCENTAGE: 0-1

COMPONENT: ZINC DIBUTYLDITHIOCARBAMATE
CAS NUMBER: 136-23-2
EC NUMBER (EINECS): 205-232-8

ORDER NO: 5204759 RELEASE NO: 001 MSDS NO: 010144

BARNES DISTRIBUTION

PERCENTAGE: 0-1

COMPONENT: SODIUM HYDROXIDE
CAS NUMBER: 1310-73-2
EC NUMBER (EINECS): 215-185-5
PERCENTAGE: 0-1

NOTE: THE IP 346 VALUE OF THE MINERAL OIL IS LESS THAN 3%

-----SECTION 3 HAZARDS IDENTIFICATION -----

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: IRRITATION
LONG TERM EXPOSURE: LUNG DAMAGE

SKIN CONTACT:

SHORT TERM EXPOSURE: IRRITATION
LONG TERM EXPOSURE: IRRITATION, SKIN DISORDERS

EYE CONTACT:

SHORT TERM EXPOSURE: IRRITATION
LONG TERM EXPOSURE: NO INFORMATION AVAILABLE

INGESTION:

SHORT TERM EXPOSURE: DIARRHEA, DIFFICULTY BREATHING
LONG TERM EXPOSURE: NO INFORMATION ON SIGNIFICANT ADVERSE EFFECTS

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS):

HEALTH 1
FLAMMABILITY 1
REACTIVITY 0

NOT A CONTROLLED PRODUCT UNDER (WHMIS): CANADA

SPECIAL PROTECTION: SEE SECTION 8

-----SECTION 4 FIRST AID MEASURES -----

INHALATION:

VAPOR PRESSURE IS VERY LOW AND INHALATION AT ROOM TEMPERATURE IS NOT A PROBLEM. IF OVERCOME BY VAPOR FROM HOT PRODUCT, IMMEDIATELY REMOVE FROM EXPOSURE AND CALL A PHYSICIAN.

SKIN CONTACT:

REMOVE ANY CONTAMINATED CLOTHING AND WASH WITH SOAP AND WARM WATER. IF INJECTED BY HIGH PRESSURE UNDER SKIN, REGARDLESS OF THE APPEARANCE OR ITS SIZE, CONTACT A PHYSICIAN IMMEDIATELY. DELAY MAY CAUSE LOSS OF AFFECTED PART OF THE BODY.

B A R N E S D I S T R I B U T I O N

EYE CONTACT:

FLUSH WITH CLEAR WATER FOR 15 MINUTES OR UNTIL IRRITATION SUBSIDES. IF IRRITATION PERSISTS, CONSULT A PHYSICIAN.

INGESTION: IF INGESTED, CALL A PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING.

-----SECTION 5 FIRE FIGHTING MEASURES -----

FIRE AND EXPLOSION HAZARDS: SLIGHT FIRE HAZARD

EXTINGUISHING MEDIA: FOAM, DRY CHEMICAL, CARBON DIOXIDE OR WATER SPRAY (FOG)

SPECIAL FIRE FIGHTING PROCEDURES:

COOL EXPOSED CONTAINERS WITH WATER. USE AIR-SUPPLIED BREATHING EQUIPMENT FOR ENCLOSED OR CONFINED SPACES.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

DO NOT STORE OR MIX WITH STRONG OXIDANTS. EMPTY CONTAINERS RETAIN RESIDUE. DO NOT CUT, DRILL, GRIND, OR WELD, AS THEY MAY EXPLODE.

-----SECTION 6 ACCIDENTAL RELEASE MEASURES -----

OCCUPATIONAL RELEASE:

SCRAPE UP GREASE, WASH REMAINDER WITH SUITABLE PETROLEUM SOLVENT OR ADD ABSORBENT. KEEP PETROLEUM PRODUCTS OUT OF SEWERS AND WATER COURSES. ADVISE AUTHORITIES IF PRODUCT HAS ENTERED OR MAY ENTER SEWERS AND WATER COURSES.

-----SECTION 7 HANDLING AND STORAGE -----

STORAGE:

KEEP CONTAINERS CLOSED WHEN NOT IN USE. DO NOT HANDLE OR STORE NEAR HEAT, SPARKS, FLAME, OR STRONG OXIDANTS.

-----SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION -----

EXPOSURE LIMITS:

OIL MIST IN AIR (NOT ENCOUNTERED IN NORMAL USAGE):

5 MG/M3 UK OES TWA
10 MG/M3 UK OES STEL

VENTILATION:

PROVIDE LOCAL EXHAUST VENTILATION SYSTEM. ENSURE COMPLIANCE WITH APPLICABLE EXPOSURE LIMITS.

EYE PROTECTION:

WEAR SPLASH RESISTANT SAFETY GOGGLES. PROVIDE AN EMERGENCY EYE WASH FOUNTAIN AND QUICK DRENCH SHOWER IN THE IMMEDIATE WORK AREA.

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CLOTHING: WEAR APPROPRIATE CHEMICAL RESISTANT CLOTHING.

GLOVES: WEAR APPROPRIATE CHEMICAL RESISTANT (NITRILE) GLOVES.

RESPIRATOR:

CONSIDER THE NEED FOR APPROPRIATE PROTECTIVE EQUIPMENT, SUCH AS SELF-CONTAINED BREATHING APPARATUS, ADEQUATE MASKS AND FILTERS.

-----SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: SOLID

APPEARANCE: SMOOTH

COLOR: OFF-WHITE

PHYSICAL FORM: GREASE

ODOR: MINERAL OIL ODOR

BOILING POINT: >288 DEG. C

FREEZING POINT: NOT AVAILABLE

FLASH POINT: 182 DEG. C (COC)

LOWER FLAMMABLE LIMIT: 0.9% BY VOLUME

UPPER FLAMMABLE LIMIT: 7.0% BY VOLUME

AUTO IGNITION: NOT AVAILABLE

VAPOR PRESSURE: NOT AVAILABLE

VAPOR DENSITY (AIR=1): NOT AVAILABLE

SPECIFIC GRAVITY (WATER=1): 0.89

DENSITY: NOT AVAILABLE

WATER SOLUBILITY: NEGLIGIBLE

pH: NOT AVAILABLE

VOLATILITY: NOT AVAILABLE

ODOR THRESHOLD: NOT AVAILABLE

EVAPORATION RATE (BUTYL ACETATE = 1): <0.01

VISCOSITY: NOT AVAILABLE

COEFFICIENT OF WATER/OIL DISTRIBUTION: NOT AVAILABLE

B A R N E S D I S T R I B U T I O N

-----SECTION 10 STABILITY AND REACTIVITY -----

REACTIVITY: STABLE AT NORMAL TEMPERATURES AND PRESSURES

CONDITIONS TO AVOID:

AVOID HEAT, FLAMES, SPARKS AND OTHER SOURCES OF IGNITION. AVOID CONTACT WITH INCOMPATIBLE MATERIALS.

INCOMPATIBLES: OXIDISING MATERIALS, CHLORINE

HAZARDOUS DECOMPOSITION:

THERMAL DECOMPOSITION PRODUCTS OR COMBUSTION:
OXIDES OF CARBON, OXIDES OF SULPHUR

POLYMERISATION: WILL NOT POLYMERISE.

-----SECTION 11 TOXICOLOGICAL INFORMATION -----

HEAVY HYDROTREATED NAPHTHENIC DISTILLATES (PETROLEUM):
TOXICITY DATA: LOW ORDER OF DERMAL AND ORAL TOXICITY

FATTY ACID:

TOXICITY DATA: NO DATA AVAILABLE

ZINC OXIDE:

TOXICITY DATA: NO DATA AVAILABLE

CALCIUM HYDROXIDE:

TOXICITY DATA: NO DATA AVAILABLE

ZINC DIBUTYLDITHIOCARBAMATE:

TOXICITY DATA: GREATER THAN 16,000 MG/KG ORAL-RAT LD50

SODIUM HYDROXIDE:

TOXICITY DATA: NO DATA AVAILABLE

-----SECTION 12 ECOLOGICAL INFORMATION -----

NOT AVAILABLE

-----SECTION 13 DISPOSAL CONSIDERATIONS -----

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS

-----SECTION 14 TRANSPORT INFORMATION -----

ORDER NO: 5204759 RELEASE NO: 001 MSDS NO: 010144

B A R N E S D I S T R I B U T I O N

LAND TRANSPORT ADR: NO CLASSIFICATION ASSIGNED.

LAND TRANSPORT RID: NO CLASSIFICATION ASSIGNED.

AIR TRANSPORT IATA: NO CLASSIFICATION ASSIGNED.

AIR TRANSPORT ICAO: NO CLASSIFICATION ASSIGNED.

MARITIME TRANSPORT IMDG: NO CLASSIFICATION ASSIGNED.

-----SECTION 15 REGULATORY INFORMATION -----

EUROPEAN REGULATIONS:

EC CLASSIFICATION (CALCULATED): N

RISK PHRASES:

R51/53:

TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

-----SECTION 16 OTHER INFORMATION -----

THE ABOVE INFORMATION IS FURNISHED WITHOUT WARRANTY, EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE OF LUBRIPLATE LUBRICANTS COMPANY. THE DATA ON THESE SHEETS RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN. LUBRIPLATE LUBRICANTS COMPANY ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THIS DATA.

ORDER NO: 6234014 RELEASE NO: 001 MSDS NO: 011722

BARNES DISTRIBUTION

Synonyms: CD21431 C37043 16GDLTWINPK 21431
MSDS

"BLASTER(R*)"

MATERIAL SAFETY DATA SHEET

THE BLASTER CORPORATION

PB PENETRATING CATALYST

MSDS NUMBER: PB - AEROSOL

REVISION DATE: 10/16/13

-----1 PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: PB PENETRATING CATALYST

REVISION DATE: 10/16/13

MSDS NUMBER: PB - AEROSOL

COMMON NAME: PB BLASTER

PRODUCT CODE: 16-PB, 8-PB, 8-PBS, PBTS, 20-PB

MANUFACTURER:
THE BLASTER CORPORATION
8500 SWEET VALLEY DRIVE
VALLEY VIEW, OHIO 44125

(216) 901-5800
(216) 901-5801 FAX
WWW.BLASTERPRODUCTS.COM

24 HOUR EMERGENCY CONTACT: CHEMTREC: (800) 424-9300

-----2 COMPOSITION/INFORMATION ON INGREDIENTS -----

HAZARDOUS INGREDIENTS	CAS #	PERCENT	EXPOSURE LIMITS
DINONYLPHENOL ETHOXYLATED PHOSPHATED	39464-64-7	0-3%	OSHA (TWA): N/E ACGIH (TWA): N/E
SOLVENT NAPHTHA, HEAVY AROMATIC**	64742-94-5	40-50%	OSHA (TWA): N/E ACGIH (TWA): N/E
HEAVY PETROLEUM DISTILLATE***	64742-65-0	20-30%	OSHA (TWA): N/E ACGIH (TLV): N/E

	BARNES DISTRIBUTION		
HYDROTREATED LIGHT DISTILLATE	64742-47-8	30-40%	OSHA (TWA): N/E ACGIH (PEL): 500 PPM
CARBON DIOXIDE (PROPELLANT)	124-38-9	1-5%	OSHA (TWA): 5000 PPM ACGIH (TWA): 5000 PPM

** AROMATIC NAPHTHA CONTAINS 1-7% NAPHTHALENE (91-20-3) AND 0-1% PSEUDOCUMENE (95-63-6)

*** CONTAINS NAPHTHENIC OIL 64742-53-6

-----3 HAZARDS IDENTIFICATION -----

ROUTE OF ENTRY: EYES, SKIN, INHALATION, INGESTION

TARGET ORGANS:

INHALATION:

INHALATION OF SPRAY MIST MAY CAUSE IRRITATION TO THE RESPIRATORY TRACT. MAY AGGRAVATE PRE-EXISTING RESPIRATORY DISORDERS.

SKIN CONTACT:

REPEATED OR PROLONGED CONTACT WITH SKIN MAY CAUSE MILD IRRITATION AND POSSIBLY DERMATITIS. MAY AGGRAVATE PRE-EXISTING SKIN DISORDERS.

EYE CONTACT:

LIKELY TO CAUSE IMMEDIATE OR DELAYED IRRITATION. IRRITATION WILL SHOW AS REDNESS AND/OR SWELLING OF THE EYES.

INGESTION: INGESTION MAY CAUSE IRRITATION TO THE MOUTH, ESOPHAGUS AND STOMACH.

AEROSOLS:

SUDDEN RELEASE OF PRESSURE COULD PRODUCE PROJECTILES AND ATOMIZED COMBUSTIBLE LIQUID.

NOTICE:

REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

-----4 FIRST AID MEASURES -----

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CONTINUE TO MONITOR. GET MEDICAL ATTENTION.

SKIN CONTACT:

REMOVE CONTAMINATED CLOTHING IMMEDIATELY!
WASH SKIN WITH SOAP AND WATER. IF IRRITATION DEVELOPS, SEEK MEDICAL ATTENTION.

BARNES DISTRIBUTION

EYE CONTACT:

FLUSH EYE(S) WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION. IF EYE IRRITATION PERSISTS, OBTAIN MEDICAL TREATMENT.

INGESTION:

DO NOT INDUCE VOMITING!
GET MEDICAL ATTENTION IMMEDIATELY!

-----5 FIRE FIGHTING MEASURES -----

FLASH POINT: 150 DEG. F (TCC) MINIMUM

EXTINGUISHING MEDIA:

DRY CHEMICAL, CARBON DIOXIDE OR FOAM IS RECOMMENDED. WATER MAY BE INEFFECTIVE FOR EXTINGUISHMENT, BUT CAN BE USEFUL IN MINIMIZING OR DISPERSING VAPORS, PROTECTING PERSONNEL AND COOLING CONTAINERS. IF CONTAINERS ARE NOT PROPERLY COOLED THEY CAN RUPTURE IN THE HEAT OF A FIRE. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES.

UNUSUAL FIRE & EXPLOSION HAZARDS:

LEVEL 3 AEROSOLS - CONTENTS UNDER PRESSURE!

-----6 ACCIDENTAL RELEASE MEASURES -----

ELIMINATE ALL SOURCES OF IGNITION AND VENTILATE THE AREA. SEE SECTION 8 FOR THE APPROPRIATE PERSONAL PROTECTION. AEROSOL CANS SHOULD BE HANDLED WITH CAUTION. SUDDEN RELEASE OF PRESSURE COULD PRODUCE PROJECTILES AND ATOMIZED COMBUSTIBLE LIQUID. LEAKING AEROSOL CANS SHOULD BE PUT INTO SUITABLE CONTAINER UNTIL THE INTERNAL PRESSURE HAS DISSIPATED. TAKE PRECAUTIONS TO PREVENT CONTAMINATION OF GROUND AND SURFACE WATERS. DO NOT FLUSH INTO SEWERS OR STORM DRAINS. USE SUITABLE ABSORBENTS TO COLLECT LIQUID PRODUCT. CONSULT REGULATIONS FOR THE PROPER DISPOSAL OF THE CONTAINER, LIQUID AND ABSORBENTS.

-----7 HANDLING AND STORAGE -----

HANDLING PRECAUTIONS:

USE IN ACCORDANCE WITH GOOD INDUSTRIAL WORKPLACE PRACTICES. AVOID UNNECESSARY CONTACT. WASH THOROUGHLY AFTER HANDLING. USE WITH GOOD VENTILATION.

STORAGE REQUIREMENTS:

STORE IN A DRY PLACE AWAY FROM EXCESSIVE HEAT. STORE CONTAINERS WITH LIDS ON AND PROPERLY LABELED.

DO NOT STORE AT TEMPERATURES ABOVE 120 DEGREES F.

-----8 EXPOSURE CONTROLS/PERSONAL PROTECTION -----

ENGINEERING CONTROLS:

BARNES DISTRIBUTION
EYE WASH STATIONS AND EMERGENCY SHOWERS SHOULD BE IMMEDIATELY AVAILABLE.

PROTECTIVE EQUIPMENT:

EYES AND FACE:

STANDARD SAFETY GLASSES WITH SPLASH SHIELDS TYPICALLY OFFER ADEQUATE PROTECTION. WHERE EXCESSIVE SPLASHING OR SPRAYING IS POSSIBLE, A FACE SHIELD SHOULD BE USED.

SKIN AND CLOTHING:

EXCESSIVE CONTACT SHOULD BE AVOIDED. NEOPRENE GLOVES, BOOTS AND APRONS WILL PROVIDE ADEQUATE PROTECTION WHEN CONTACT CANNOT BE AVOIDED. REMOVE AND WASH ANY CONTAMINATED CLOTHING IMMEDIATELY. WASH THOROUGHLY AFTER HANDLING.

RESPIRATORY:

GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT TO CONTROL AIRBORNE LEVELS. MAINTAIN AIRBORNE CONCENTRATIONS BELOW OSHA ESTABLISHED EXPOSURE LIMITS OF INGREDIENTS IN SECTION 2. USE A NIOSH APPROVED RESPIRATOR IF VENTILATION IS NOT ADEQUATE TO MAINTAIN EXPOSURES BELOW TLV LEVELS.

EXPOSURE GUIDELINES/OTHER:

THE BLASTER CORPORATION TAKES NO RESPONSIBILITY FOR DETERMINING WHAT MEASURES ARE REQUIRED FOR PERSONAL PROTECTION IN ANY SPECIFIC APPLICATION. THIS INFORMATION SHOULD BE USED WITH DISCRETION.

-----9 PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE: ORANGE VISCOUS OILY

PHYSICAL STATE: LIQUID

ODOR: HEAVY AROMATIC

pH: NOT DETERMINED

VAPOR PRESSURE: NOT DETERMINED

VAPOR DENSITY: >1 (AIR = 1)

BOILING POINT: 352 F

FREEZING/MELTING PT.: NOT DETERMINED

SOLUBILITY: NIL

SPEC GRAV./DENSITY: 0.91 (WATER = 1)

HEAT VALUE: NOT DETERMINED

VOC: <50%

EVAP. RATE: <1 (NBA = 1)

ORDER NO: 6234014 RELEASE NO: 001 MSDS NO: 011722

BARNES DISTRIBUTION

BULK DENSITY: NOT DETERMINED

OCTANOL: NOT APPLICABLE

MOLECULAR WEIGHT: NOT DETERMINED

PARTICLE SIZE: NOT APPLICABLE

SOFTENING POINT: NOT APPLICABLE

VISCOSITY: NOT DETERMINED

PERCENT VOLATILE: NOT DETERMINED

SAT. VAP. CONCENTRAT.: NOT DETERMINED

MOLECULAR FORMULA: NOT DETERMINED

-----10 STABILITY AND REACTIVITY -----

STABILITY: THIS PRODUCT IS STABLE.

CONDITIONS TO AVOID:

AVOID EXCESSIVE HEAT, SOURCES OF IGNITION AND EXCESSIVE WATER.

MATERIALS TO AVOID (INCOMPATIBILITY):

AVOID CONTACT WITH STRONG OXIDIZING AGENTS AND STRONG REDUCING AGENTS (STRONG ACIDS OR BASES.) AVOID MIXTURE WITH WATER.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE, CARBON DIOXIDE, AND VARIOUS HYDROCARBONS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

-----11 TOXICOLOGICAL INFORMATION -----

HYDROTREATED LIGHT DISTILLATES 64742-47-8:

ACUTE STUDIES:

EYE EFFECTS: SLIGHT IRRITATION ON CONTACT.

SKIN EFFECTS:

MAY CAUSE IRRITATION OR DERMATITIS WITH PROLONGED AND REPEATED CONTACT.

ACUTE ORAL EFFECTS:

TESTS ON SIMILAR MATERIALS INDICATE AN ORDER OF ACUTE ORAL TOXICITY.

ACUTE INHALATION EFFECTS: ACUTE TOXICITY EXPECTED ON INHALATION.

BARNES DISTRIBUTION

THIS PRODUCT IS NOT LISTED AS CARCINOGENIC OR A POTENTIAL CARCINOGEN BY THE NATIONAL TOXICOLOGY PROGRAM, BY THE I.A.R.C. MONOGRAPHS OR BY OSHA. THEREFORE, IF THE PRECAUTIONS OUTLINED IN THIS BULLETIN ARE FOLLOWED TO MINIMIZE REPEATED OR PROLONGED SKIN CONTACT WHICH COULD CAUSE IRRITATION, THESE OILS SHOULD POSE NO CARCINOGENIC HAZARD TO HUMANS. PROLONGED REPEATED SKIN CONTACT WITH LOW VISCOSITY MATERIALS MAY DEFAT THE SKIN RESULTING IN POSSIBLE IRRITATION AND DERMATITIS. NEVERTHELESS, GOOD INDUSTRIAL HYGIENIC PRACTICES ARE RECOMMENDED.

HEAVY PETROLEUM DISTILLATE 64742-65-0:

CONTAINS: NAPHTHENIC OIL 64742-53-6

INHALATION:

WILL NOT PRODUCE VAPORS UNLESS HEATED TO TEMPERATURES OF APPROX. 300 F. DEG.

EYE CONTACT: IRRITATING, BUT WILL NOT PERMANENTLY INJURE EYE TISSUE.

SKIN CONTACT: PROLONGED OR REPEATED CONTACT MAY CAUSE SKIN IRRITATION.

INGESTION:

SMALL AMOUNTS (TABLESPOONFUL) SWALLOWED ARE NOT LIKELY TO CAUSE INJURY. LARGER AMOUNTS MAY CAUSE NAUSEA AND VOMITING. CONSULT A PHYSICIAN PROMPTLY.

CHRONIC (CANCER) INFORMATION:

IARC MONOGRAPHS STATE THAT WHEN LABORATORY ANIMALS ARE EXPOSED TO SEVERELY HYDROTREATED OILS, SUCH AS THESE PRODUCT(S), THERE IS INSUFFICIENT EVIDENCE FOR CANCER. THUS, THESE OILS ARE UNLABELED IN ACCORDANCE WITH 29 CFR 1910.1200.

MEDIAN LETHAL DOSE (LD50 LC50) (SPECIES):

ORAL: BELIEVED TO BE >5 G/KG (RAT); PRACTICALLY NON-TOXIC

INHALATION: NOT DETERMINED

DERMAL: BELIEVED TO BE >3 G/KG (RAT); PRACTICALLY NON-TOXIC.

IRRITATION INDEX ESTIMATION OF IRRITATION (SPECIES).

SKIN: BELIEVED TO BE <0.5/8.0 (RABBIT); NO APPRECIABLE EFFECT

EYES: BELIEVED TO BE <15/110 (RABBIT); NO APPRECIABLE EFFECT

SENSITIZATION: NOT AVAILABLE

OTHER: NONE

AROMATIC PETROLEUM DISTILLATES 64742-94-5:

OVER EXPOSURE TO NAPHTHALENE, A MINOR COMPONENT IN HEAVY AROMATIC NAPHTHA MAY CAUSE SKIN, EYE AND RESPIRATORY TRACT IRRITATION, ANEMIA, LOSS OF VISION, NERVOUS SYSTEM EFFECTS AND KIDNEY AND THYMUS DAMAGE. ALSO EXPOSURE TO NAPHTHALENE HAS PRODUCED "RESPIRATORY TRACT" TUMORS IN LABORATORY ANIMALS. IARC LIST NAPHTHALENE AS GROUP 2B (POSSIBLY CARCINOGENIC TO HUMANS).

BARNES DISTRIBUTION

HEAVY AROMATIC SOLVENT NAPHTHA	64742-94-5		
NAPHTHALENE	91-20-3	1-7	OSHA (TWA): 10 PPM ACGIH (TWA): 10 PPM
PSEUDOCUMENE	95-63-6	0-1	

DINONYLPHENOL, ETHOXYLATED, PHOSPHATED 39464-64-7:

INHALATION: IRRITATING

EYE CONTACT: IRRITATING, BUT WILL NOT PERMANENTLY INJURE EYE TISSUE.

SKIN CONTACT: PROLONGED OR REPEATED CONTACT MAY CAUSE SKIN IRRITATION.

INGESTION: MAY CAUSE IRRITATION.

CHRONIC (CANCER) INFORMATION: NOT LISTED

NO KNOWN LONG TERM EFFECTS.

-----12 ECOLOGICAL INFORMATION -----

ECOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT.

-----13 DISPOSAL CONSIDERATIONS -----

IF THIS PRODUCT BECOMES A WASTE, IT WOULD BE EXPECTED TO MEET THE CRITERIA OF A RCRA HAZARDOUS WASTE FOR THE CHARACTERISTIC OF IGNITABILITY WITH A WASTE CODE OF D001. (SEE 40 CFR PART 261.20 - 261.33) IT IS THE RESPONSIBILITY OF THE GENERATOR TO DETERMINE AT THE TIME OF DISPOSAL THE PROPER CLASSIFICATION AND METHOD OF DISPOSAL

AEROSOL CONTAINERS SHOULD BE EMPTIED AND DEPRESSURIZED BEFORE DISPOSAL. EMPTY CONTAINERS MAY BE RECYCLED.

ALL DISPOSAL ACTIVITIES MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS. LOCAL REGULATIONS MAY BE MORE STRINGENT THAN STATE OR NATIONAL REQUIREMENTS.

-----14 TRANSPORT INFORMATION -----

DOT AND IMDG SHIPPING DESCRIPTION: UN1950, AEROSOLS, 2.1, LTD QTY

THE BLASTER CORPORATION DOES NOT RECOMMEND SHIPPING THEIR AEROSOL PRODUCTS BY AIR.

-----15 REGULATORY INFORMATION -----

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA)
103 REPORTABLE QUANTITY:

THIS PRODUCT IS NOT SUBJECT TO CERCLA REPORTING REQUIREMENTS, HOWEVER, OIL SPILLS ARE REPORTABLE TO THE NATIONAL RESPONSE CENTER UNDER THE CLEAN WATER ACT AND MANY STATES HAVE MORE STRINGENT RELEASE REPORTING REQUIREMENTS. REPORT SPILLS REQUIRED UNDER FEDERAL, STATE AND LOCAL REGULATIONS.

SUPERFUND AMENDMENTS REAUTHORIZATION ACT (SARA TITLE) III:
HAZARD CATEGORY FOR SECTION 311/312: ACUTE HEALTH, FIRE HAZARD, SUDDEN RELEASE OF

BARNES DISTRIBUTION

PRESSURE

SECTION 313 TOXIC CHEMICALS: THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS
SUBJECT TO SARA TITLE III SECTION 313 REPORTING REQUIREMENTS: NONE

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (TPQ): NONE

EPA TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS: ALL OF THE COMPONENTS OF THIS
PRODUCT ARE LISTED ON THE TSCA INVENTORY.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): THIS
PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

VOC REGULATIONS: THIS PRODUCT COMPLIES WITH THE CONSUMER PRODUCT VOC LIMITS OF
CARB, THE US EPA AND STATES ADOPTING THE OTC VOC RULES.

CONSUMER PRODUCT SAFETY ACT GENERAL CONFORMITY CERTIFICATION:
THIS PRODUCT WAS EVALUATED BY THE BLASTER CORPORATION, AND IS CERTIFIED TO BE
IN COMPLIANCE WITH THE PROVISIONS OF THE CONSUMER PRODUCT SAFETY ACT, THE
FEDERAL HAZARDOUS SUBSTANCES ACT AND THE POISON PREVENTION PACKAGING ACT, AS
APPLICABLE. THIS PRODUCT WAS MANUFACTURED AT THE LOCATION LISTED IN SECTION 1
OF THIS MSDS. THE DATE OF MANUFACTURE IS STAMPED ON THE PRODUCT CONTAINER. NO
TESTING IS REQUIRED TO CERTIFY COMPLIANCE WITH THE ABOVE.

-----16 OTHER INFORMATION -----

MANUFACTURER'S DISCLAIMER:
TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE.
HOWEVER, NEITHER THE BLASTER CORPORATION NOR ANY OF ITS SUBSIDIARIES ASSUMES
ANY LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION
CONTAINED HEREIN. FINAL DETERMINATION OF SUITABILITY OF ANY MATERIAL IS THE
SOLE RESPONSIBILITY OF THE USER. ALL MATERIALS MAY PRESENT UNKNOWN HAZARDS AND
SHOULD BE USED WITH CAUTION. ALTHOUGH CERTAIN HAZARDS ARE DESCRIBED HEREIN, WE
CANNOT GUARANTEE THAT THESE ARE THE ONLY HAZARD WHICH EXISTS.

HMSIS RATINGS:
HEALTH 2
FIRE 2
REACTIVITY 0

NFPA RATINGS:
HEALTH 2
FIRE 2
REACTIVITY 0

ORDER NO: 4309623 RELEASE NO: 001 MSDS NO: 012491

BARNES DISTRIBUTION

Synonyms: BD1535 BD1535-1
MATERIAL SAFETY DATA SHEET

COMPLIES WITH OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200

MANUFACTURED FOR:
BARNES DISTRIBUTION
THE GALLERIA & TOWER AT ERIEVIEW
1301 E. 9TH STREET, STE #700
CLEVELAND OH 44114

EMERGENCY TELEPHONE NUMBER:
CHEMTREC: 1-800-424-9300

DATE PREPARED: FEBRUARY 26, 2012

PRODUCT TYPE: CLEANER

PRODUCT NAME: INDUSTRIAL BRAKE CLEANER & WASH BD1535

-----SECTION 1 - IDENTIFICATION OF PRODUCT -----

COMMON NAME (USED ON LABEL)(TRADE NAME & SYNONYMS):
INDUSTRIAL BRAKE CLEANER & WASH BD1535

CAS. NUMBER: SEE SECTION 2

CHEMICAL NAME: PERCHLOROETHYLENE

CHEMICAL FAMILY: N/A

FORMULA: N/A

HMS RATINGS:
HEALTH 2
FLAMMABILITY 0
REACTIVITY 0
PERSONAL PROTECTION B

MINIMAL HAZARD: 0
SLIGHT HAZARD: 1
MODERATE HAZARD: 2
SERIOUS HAZARD: 3
SEVERE HAZARD: 4
GLOVES, SAFETY GLASSES: B

-----SECTION 2 - HAZARDOUS INGREDIENTS -----

PRINCIPAL HAZARDOUS COMPONENT(S):

CHEMICAL AND COMMON	CAS. #	OSHA PEL	ACGIH TLV	VAPOR PRESSURE @	LEL	UEL	FLASH POINT	% BY WT.
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ORDER NO: 4309623 RELEASE NO: 001 MSDS NO: 012491

NAME(S)	B A R N E S		D I S T R I B U T I O N				DEG. F	
	25 DEG. C.							
PERCHLORO-ETHYLENE**	127-18-4	25 PPM	25 PPM	13 MMHg	NONE	NONE	NONE	95
CARBON DIOXIDE	124-38-9	5000 PPM		1 ATM.	NONE		NONE	5

**NOTE:

THIS PRODUCT CONTAINS AN INGREDIENT SUBJECT TO SECTION 313 OF SARA TITLE III.

WARNING:

THIS PRODUCT CONTAINS PERCHLOROETHYLENE, WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

N/A IS NOT AVAILABLE OR NOT APPLICABLE

-----SECTION 3 - PHYSICAL DATA -----

BOILING POINT (DEG. F):
CONCENTRATE: 250

SPECIFIC GRAVITY (WATER = 1):
CONCENTRATE: 1.62

VAPOR PRESSURE (MMHg): SEE SECTION 2

PERCENT VOLATILE BY WEIGHT (%): 95%

VAPOR DENSITY (AIR = 1): >1

EVAPORATION RATE (BA = 1): >1

SOLUBILITY IN WATER: NEGLIGIBLE

REACTIVITY IN WATER: NONE

APPEARANCE AND ODOR:

CONCENTRATE: CLEAR LIQUID, IRRITATING ODOR AT HIGH CONCENTRATIONS
PROPELLANT: COLORLESS, ODORLESS GAS
FINISHED PACKAGE: PRESSURIZED CONTAINERS.

-----SECTION 4 - FIRE & EXPLOSION HAZARD DATA -----

FLASH POINT: SEE SECTION 2

FLAMMABLE LIMITS IN AIR - % BY VOLUME: SEE SECTION 2

EXTINGUISHER MEDIA: WATER FOG, DRY CHEMICAL, AND CARBON DIOXIDE

AUTO-IGNITION TEMPERATURE: UNKNOWN

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SPECIAL FIRE FIGHTING PROCEDURES:

WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE BURSTING WHEN EXPOSED TO HIGH TEMPERATURES. FIREMEN SHOULD WEAR SELF-CONTAINED, POSITIVE PRESSURE, RESPIRATORY EQUIPMENT.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

THIS PRODUCT SHOULD NOT BE USED OR STORED NEAR ANY OPEN FLAMES OR IGNITION SOURCES. CONTENTS UNDER PRESSURE. SELF-PRESSURIZED AEROSOL CONTAINERS. KEEP TEMPERATURE OF CONTAINERS BELOW 120 DEG. F. TO PREVENT BURSTING. HAZARDOUS DECOMPOSITION PRODUCTS.

-----SECTION 5 - HEALTH HAZARD DATA -----

THRESHOLD LIMIT VALUE: SEE SECTION 2

SIGNS AND SYMPTOMS OF EXPOSURE:

EYE CONTACT:

CONTACT WITH LIQUID OR MIST MAY CAUSE IRRITATION. VAPORS MAY IRRITATE EYES

SKIN CONTACT: PROLONGED CONTACT MAY CAUSE IRRITATION, DEFATTING OF SKIN

INHALATION:

OVEREXPOSURE TO VAPOR MAY CAUSE DIZZINESS, LOSS OF CONCENTRATION AND IRRITATION. WITH HIGH EXPOSURE LEVELS, EFFECTS CAN INCLUDE CENTRAL NERVOUS SYSTEM (CNS), DEPRESSION (INTOXICATION) AND CARDIAC ARRHYTHMIA. PRODUCT VAPORS DISPLACE AIR AND CAN CAUSE SUFFOCATION ESPECIALLY IN CONFINED SPACE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS OF THE CAN MAY BE HARMFUL OR FATAL

INGESTION:

ASPIRATION MAY CAUSE RAPID ABSORPTION THROUGH THE LUNGS, WHICH MAY RESULT IN SYSTEMIC EFFECTS.

IMPORTANT NOTICE:

REPEATED AND PROLONGED OVEREXPOSURE TO SOLVENTS MAY LEAD TO PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. EYE WATERING, HEADACHES, NAUSEA, DIZZINESS AND LOSS OF COORDINATION ARE SIGNS THAT SOLVENT LEVELS ARE TOO HIGH. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. DO NOT GIVE EPINEPHRINE OR SIMILAR DRUGS. CALL A PHYSICIAN.

EYES:

FLUSH WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ASSISTANCE IF IRRITATION PERSISTS.

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SKIN:

WASH OFF IN FLOWING WATER OR SHOWER. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.

INGESTION:

DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY. DO NOT ADMINISTER SYMPATHOMIMETIC DRUGS UNLESS ABSOLUTELY NECESSARY. NO SPECIFIC ANTIDOTE

NOTE TO PHYSICIANS:

BECAUSE OF POSSIBLE DISTURBANCES OF CARDIAC RHYTHM, CATECHOLAMINE DRUGS, SUCH AS EPINEPHRINE, SHOULD ONLY BE USED WITH SPECIAL CAUTION IN SITUATIONS OF EMERGENCY LIFE SUPPORT.

NOTE TO PHYSICIAN:

BECAUSE RAPID ABSORPTION MAY OCCUR THROUGH LUNGS IF ASPIRATED AND CAUSE SYSTEMIC EFFECTS, THE DECISION OF WHETHER TO INDUCE VOMITING OR NOT SHOULD BE MADE BY AN ATTENDING PHYSICIAN. IF LAVAGE IS PERFORMED, SUGGEST ENDOTRACHEAL AND/OR ESOPHAGEAL CONTROL. DANGER FROM LUNG ASPIRATION MUST BE WEIGHED AGAINST TOXICITY WHEN CONSIDERING EMPTYING THE STOMACH. EXPOSURE MAY INCREASE "MYOCARDIAL IRRITABILITY". DO NOT ADMINISTER SYMPATHOMIMETIC DRUGS UNLESS ABSOLUTELY NECESSARY. NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT.

-----SECTION 6 - REACTIVITY DATA -----

STABILITY: STABLE

CONDITIONS TO AVOID:

AVOID ANY EXCESSIVE HEAT, IGNITION SOURCES, OPEN FLAMES, OR OTHER HIGH TEMPERATURES WHICH INDUCE THERMAL DECOMPOSITION.

INCOMPATIBILITY (MATERIALS TO AVOID):

CHEMICALLY ACTIVE METALS. OXIDIZING AGENTS. SODIUM, POTASSIUM, CALCIUM, ETC. ALKALI OR ALKALINE EARTH METALS. POWDERED ALUMINUM, ZINC, MAGNESIUM, BERYLLIUM, ETC.

HAZARDOUS DECOMPOSITION PRODUCTS:

HYDROGEN CHLORIDE, SMALL AMOUNTS OF PHOSGENE AND CHLORINE.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

CONDITIONS TO AVOID: NOT APPLICABLE

-----SECTION 7 - SPILL OR LEAK PROCEDURES -----

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

SMALL SPILLS:

REMOVE IGNITION SOURCES. MOP UP, WIPE UP, OR SOAK UP IMMEDIATELY. USE PROPER PROTECTIVE EQUIPMENT.

BARNES DISTRIBUTION

LARGE SPILLS:

EVACUATE AREA. REMOVE IGNITION SOURCES. CONTAIN LIQUID; TRANSFER TO CLOSED CONTAINERS; KEEP OUT OF WATER SUPPLIES.

WASTE DISPOSAL METHODS:

DISPOSE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. DO NOT INCINERATE CLOSED OR EMPTY CONTAINERS.

-----SECTION 8 - SPECIAL PROTECTION INFORMATION -----

RESPIRATORY PROTECTION:

NIOSH OR BUREAU OF MINES APPROVED ORGANIC VAPOR-TYPE RESPIRATOR IS REQUIRED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL.

VENTILATION:

LOCAL EXHAUST: TO KEEP BELOW TLV
MECHANICAL (GENERAL): TO KEEP BELOW TLV
SPECIAL: NONE
OTHER: NONE

PROTECTIVE GLOVES: SOLVENT RESISTANT GLOVES - IMPERVIOUS GLOVES

EYE PROTECTION: SAFETY GLASSES OR GOGGLES

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: NONE REASONABLY FORESEEABLE.

-----SECTION 9 - SPECIAL PRECAUTIONS -----

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

DO NOT STORE ABOVE 110 DEG. F. DO NOT USE OR STORE NEAR ANY OPEN FLAMES OR IGNITION SOURCES.

OTHER PRECAUTIONS:

CONTENTS UNDER PRESSURE. DO NOT PUNCTURE OR INCINERATE. EXPOSURE TO TEMPERATURES ABOVE 120 DEG. F MAY CAUSE CAN TO BURST WITH VIOLENCE AND CAUSE INJURY. VAPORS ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW AREAS.

-----SECTION 10 - REGULATORY INFORMATION -----

SUBJECT TO SECTION 313 OF SARA TITLE III: YES. PERCHLOROETHYLENE

ALL CHEMICAL COMPONENTS ARE LISTED IN THE TSCA INVENTORY.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN:
NATIONAL TOXICOLOGY PROGRAM: YES - PERCHLOROETHYLENE

I.A.R.C. MONOGRAPHS: YES - PERCHLOROETHYLENE

OSHA: YES - PERCHLOROETHYLENE

ORDER NO: 4309623 RELEASE NO: 001 MSDS NO: 012491

BARNES DISTRIBUTION

CANCER INFORMATION:

FOR HAZARD COMMUNICATION PURPOSES UNDER OSHA STANDARD 29 CFR PART 1910.1200, THIS CHEMICAL IS LISTED AS A POTENTIAL CARCINOGEN BY IARC AND NTP. PERCHLOROETHYLENE HAS BEEN SHOWN TO INCREASE THE RATE OF SPONTANEOUSLY OCCURRING MALIGNANT TUMORS IN CERTAIN LABORATORY RATS AND MICE. OTHER LONG-TERM INHALATION STUDIES IN RATS FAILED TO SHOW TUMORIGENIC RESPONSE. EPIDEMIOLOGY STUDIES ARE LIMITED AND HAVE NOT ESTABLISHED AN ASSOCIATION BETWEEN PERCHLOROETHYLENE EXPOSURE AND CANCER. PERCHLOROETHYLENE IS NOT BELIEVED TO POSE A MEASURABLE CARCINOGENIC RISK TO MAN WHEN HANDLED AS RECOMMENDED.

OSHA PERMISSIBLE EXPOSURE LIMIT: SEE SECTION 2

AGCIH THRESHOLD LIMIT VALUE: SEE SECTION 2

OTHER EXPOSURE LIMITED USED: NONE

-----SECTION 11 - OTHER INFORMATION -----

TRANSPORTATION INFORMATION - DOMESTIC GROUND:

SHIPPING NAME: CONSUMER COMMODITY

HAZARD CLASS: ORM-D

UN NUMBER: N/A

PACKING GROUP: N/A

HAZARD LABEL: NONE

CARTON MARKING: CONSUMER COMMODITY, ORM-D

DISCLAIMER:

SPRAY PRODUCTS CORPORATION BELIEVES THAT THE INFORMATION CONTAINED HEREIN IS ACCURATE AND RELIABLE AS OF THE DATE OF THIS MATERIAL SAFETY DATA SHEET, BUT NO REPRESENTATION GUARANTEE OR WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THE INFORMATION. PERSONS RECEIVING THIS INFORMATION ARE ENCOURAGED TO MAKE THEIR OWN DETERMINATION AS TO THE INFORMATION'S SUITABILITY AND COMPLETENESS FOR THEIR PARTICULAR APPLICATION. NO INFORMATION CONTAINED HEREIN CONSTITUTES A PRODUCT WARRANTY OF ANY KIND, WHETHER EXPRESS OR IMPLIED; AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED BY SPRAY PRODUCTS CORPORATION.

ORDER NO: 4640004 RELEASE NO: 001 MSDS NO: 013009

BARNES DISTRIBUTION

Synonyms: 21576
MATERIAL SAFETY DATA SHEET

ALPHA

MATERIAL SAFETY DATA SHEET

EMERGENCY PHONE:
ALPHA CHEMTREC #: 5591
US & CANADA: 800 424-9300
MEXICO: 01 800 022 1400, (55) 5559 1588

NFPA:
HEALTH 2
FLAMMABILITY 1
INSTABILITY 0
SPECIAL

HEALTH 2
FLAMMABILITY 1
PHYSICAL HAZARDS 0
PERSONAL PROTECTION

-----1. PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: SOLDER WIRE CORED 50Sn/50Pb ALLOY, AC94 FLUX

PRODUCT CODE: M050AC94

MANUFACTURER:
COOKSON ELECTRONICS
109 CORPORATE BLVD.
SOUTH PLAINFIELD, NJ 07080

TOLL FREE: (800) 367-5460

MAIN PHONE: (908) 791-3000

FAX: (908) 791-3090

WWW.ALPHAMETALS.COM

COOKSON ELECTRONICS MEXICO, S.A. DE C.V
AVENIDA NAFTA NO. 800
PARQUE INDUSTRIAL STIVA AEROPUERTO
APODACA, NUEVO LEON, C.P. 66600
MEXICO
WWW.COOKSONELECTRONICS.COM

CUSTOMER SERVICE: (814) 946-1611

VALIDATION DATE: 6/11/2011.

BARNES DISTRIBUTION

SUPERSEDES DATE: 4/23/2010.

PREPARED BY:
T. VALVERDE
(203)-799-4940

-----2. HAZARDS IDENTIFICATION -----

PHYSICAL STATE: SOLID.

ODOR: NONE.

OSHA/HCS STATUS:

THIS MATERIAL IS CONSIDERED HAZARDOUS BY THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EMERGENCY OVERVIEW:

WARNING!

TOXIC BY INHALATION AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. DO NOT INGEST. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. CONTAINS MATERIAL WHICH MAY CAUSE CANCER. RISK OF CANCER DEPENDS ON DURATION AND LEVEL OF EXPOSURE. CONTAINS MATERIAL WHICH MAY CAUSE HERITABLE GENETIC EFFECTS, BASED ON ANIMAL DATA. CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA. CONTAINS MATERIAL WHICH CAN CAUSE DEVELOPMENTAL ABNORMALITIES. AVOID EXPOSURE DURING PREGNANCY. CONTAINS MATERIAL WHICH CAN IMPAIR MALE FERTILITY. CONTAINS MATERIAL WHICH CAN IMPAIR FEMALE FERTILITY. USE ONLY WITH ADEQUATE VENTILATION. KEEP CONTAINER TIGHTLY CLOSED AND SEALED UNTIL READY FOR USE. WASH THOROUGHLY AFTER HANDLING.

ROUTES OF ENTRY: DERMAL CONTACT. EYE CONTACT. INHALATION. INGESTION.

POTENTIAL ACUTE HEALTH EFFECTS:

INHALATION:

TOXIC BY INHALATION. CAN CAUSE TARGET ORGAN DAMAGE. IRRITATING TO RESPIRATORY SYSTEM. EXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SERIOUS EFFECTS MAY BE DELAYED FOLLOWING EXPOSURE. THE EXPOSED PERSON MAY NEED TO BE KEPT UNDER MEDICAL SURVEILLANCE FOR 48 HOURS.

INGESTION:

TOXIC IF SWALLOWED. CAN CAUSE TARGET ORGAN DAMAGE. INGESTION MAY CAUSE GASTROINTESTINAL IRRITATION AND DIARRHEA.

SKIN:

IRRITATING TO SKIN. SKIN INFLAMMATION IS CHARACTERIZED BY ITCHING, SCALING, REDDENING OR, OCCASIONALLY, BLISTERING.

EYES:

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IRRITATING TO EYES. ADVERSE SYMPTOMS MAY INCLUDE THE FOLLOWING:
REDNESS, ITCHING, SWELLING, PAIN

POTENTIAL CHRONIC HEALTH EFFECTS:

CHRONIC EFFECTS:

ADVERSE SYMPTOMS MAY INCLUDE THE FOLLOWING:

LEAD: POISON!

OTHER ADVERSE EFFECTS:

ABDOMINAL CRAMPS AND PAIN, NAUSEA OR VOMITING, HEADACHE, MUSCLE WEAKNESS,
METALLIC TASTE, LOSS OF APPETITE, INSOMNIA, DIZZINESS/VERTIGO, "LEAD LINE"
ON GUMS, HIGH LEAD LEVELS IN BLOOD AND URINE, LOSS OF CONSCIOUSNESS OR COMA
AND DEATH.

CHRONIC EFFECTS:

IRRITABILITY, VISUAL DISTURBANCES, BLOOD PRESSURE ELEVATION AND
DISCOLORATION OF: SKIN.

TIN:

PROLONGED OR REPEATED EXPOSURE MAY CAUSE BENIGN PNEUMOCONIOSIS (STANNOSIS).

UREA: MENTAL CONFUSION OR DISORIENTATION, HEADACHE.

CHRONIC EFFECTS: PROTEINURIA, WEIGHT LOSS.

TARGET ORGANS:

CONTAINS MATERIAL WHICH MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS:
BLOOD, KIDNEYS, THE REPRODUCTIVE SYSTEM, MUCOUS MEMBRANES, GASTROINTESTINAL
TRACT, CARDIOVASCULAR SYSTEM, UPPER RESPIRATORY TRACT, SKIN, EYES, CENTRAL
NERVOUS SYSTEM (CNS).

CARCINOGENICITY:

CONTAINS MATERIAL WHICH MAY CAUSE CANCER. RISK OF CANCER DEPENDS ON DURATION
AND LEVEL OF EXPOSURE.

MUTAGENICITY:

CONTAINS MATERIAL WHICH MAY CAUSE HERITABLE GENETIC EFFECTS, BASED ON ANIMAL
DATA.

TERATOGENICITY:

CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA.

DEVELOPMENTAL EFFECTS:

CONTAINS MATERIAL WHICH CAN CAUSE DEVELOPMENTAL ABNORMALITIES.

FERTILITY EFFECTS:

CONTAINS MATERIAL WHICH CAN IMPAIR MALE FERTILITY. CONTAINS MATERIAL WHICH
CAN IMPAIR FEMALE FERTILITY.

CALIFORNIA PROP. 65:

WARNING:

BARNES DISTRIBUTION

THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:
PRE-EXISTING RESPIRATORY AND DIGESTIVE DISORDERS AND DISORDERS INVOLVING ANY OTHER TARGET ORGANS MENTIONED IN THIS MSDS AS BEING AT RISK MAY BE AGGRAVATED BY OVER-EXPOSURE TO THIS PRODUCT.

-----3. COMPOSITION/INFORMATION ON INGREDIENTS -----

NAME	CAS NUMBER	% BY WEIGHT
TIN	7440-31-5	40-50
LEAD	7439-92-1	40-50
ADDITIVE	--	1-5

ANY INGREDIENT NOT LISTED IN SECTION 3 IS NON-REGULATED OR PRESENT IN THE PRODUCT IN CONCENTRATIONS BELOW LEGAL DISCLOSURE LIMITS.

-----4. FIRST AID MEASURES -----

EYE CONTACT:

CHECK FOR AND REMOVE ANY CONTACT LENSES. GET MEDICAL ATTENTION IF IRRITATION OCCURS. IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR AT LEAST 30 MINUTES, KEEPING EYELIDS OPEN.

SKIN CONTACT:

FLUSH CONTAMINATED SKIN WITH PLENTY OF WATER. REMOVE CONTAMINATED CLOTHING AND SHOES. CONTINUE TO RINSE FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. WASH CONTAMINATED CLOTHING BEFORE REUSE. CLEAN SHOES THOROUGHLY BEFORE REUSE. IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.

INHALATION:

GET MEDICAL ATTENTION IMMEDIATELY. MOVE EXPOSED PERSON TO FRESH AIR. IF IT IS SUSPECTED THAT FUMES ARE STILL PRESENT, THE RESCUER SHOULD WEAR AN APPROPRIATE MASK OR SELF-CONTAINED BREATHING APPARATUS. KEEP PERSON WARM AND AT REST. IF NOT BREATHING, IF BREATHING IS IRREGULAR OR IF RESPIRATORY ARREST OCCURS, PROVIDE ARTIFICIAL RESPIRATION OR OXYGEN BY TRAINED PERSONNEL. IT MAY BE DANGEROUS TO THE PERSON PROVIDING AID TO GIVE MOUTH-TO-MOUTH RESUSCITATION. IF UNCONSCIOUS, PLACE IN RECOVERY POSITION AND GET MEDICAL ATTENTION IMMEDIATELY. MAINTAIN AN OPEN AIRWAY. LOOSEN TIGHT CLOTHING SUCH AS A COLLAR, TIE, BELT OR WAISTBAND. IN CASE OF INHALATION OF DECOMPOSITION PRODUCTS IN A FIRE, SYMPTOMS MAY BE DELAYED. THE EXPOSED PERSON MAY NEED TO BE KEPT UNDER MEDICAL SURVEILLANCE FOR 48 HOURS.

INGESTION:

GET MEDICAL ATTENTION IMMEDIATELY. WASH OUT MOUTH WITH WATER. REMOVE DENTURES IF ANY. MOVE EXPOSED PERSON TO FRESH AIR. KEEP PERSON WARM AND AT

BARNES DISTRIBUTION

REST. DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. IF VOMITING OCCURS, THE HEAD SHOULD BE KEPT LOW SO THAT VOMIT DOES NOT ENTER THE LUNGS. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IF UNCONSCIOUS, PLACE IN RECOVERY POSITION AND GET MEDICAL ATTENTION IMMEDIATELY. MAINTAIN AN OPEN AIRWAY. LOOSEN TIGHT CLOTHING SUCH AS A COLLAR, TIE, BELT OR WAISTBAND. IF NOT BREATHING, IF BREATHING IS IRREGULAR OR IF RESPIRATORY ARREST OCCURS, PROVIDE ARTIFICIAL RESPIRATION OR OXYGEN BY TRAINED PERSONNEL.

PROTECTION OF FIRST-AIDERS:

NO ACTION SHALL BE TAKEN INVOLVING ANY PERSONAL RISK OR WITHOUT SUITABLE TRAINING. IT MAY BE DANGEROUS TO THE PERSON PROVIDING AID TO GIVE MOUTH-TO-MOUTH RESUSCITATION. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION. IF IT IS SUSPECTED THAT FUMES ARE STILL PRESENT, THE RESCUER SHOULD WEAR AN APPROPRIATE MASK OR SELF-CONTAINED BREATHING APPARATUS. WASH CONTAMINATED CLOTHING THOROUGHLY WITH WATER BEFORE REMOVING IT, OR WEAR GLOVES.

-----5. FIRE-FIGHTING MEASURES -----

FLAMMABILITY OF THE PRODUCT: NO SPECIFIC FIRE OR EXPLOSION HAZARD.

EXTINGUISHING MEDIA:

SUITABLE: USE AN EXTINGUISHING AGENT SUITABLE FOR THE SURROUNDING FIRE.
NOT SUITABLE: NONE KNOWN.

SPECIAL EXPOSURE HAZARDS:

PROMPTLY ISOLATE THE SCENE BY REMOVING ALL PERSONS FROM THE VICINITY OF THE INCIDENT IF THERE IS A FIRE. NO ACTION SHALL BE TAKEN INVOLVING ANY PERSONAL RISK OR WITHOUT SUITABLE TRAINING.

HAZARDOUS COMBUSTION PRODUCTS:

CARBON OXIDES
NITROGEN OXIDES
METAL OXIDE/OXIDES

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:

FIRE-FIGHTERS SHOULD WEAR APPROPRIATE PROTECTIVE EQUIPMENT AND SELF-CONTAINED BREATHING APPARATUS (SCBA) WITH A FULL FACE-PIECE OPERATED IN POSITIVE PRESSURE MODE.

-----6. ACCIDENTAL RELEASE MEASURES -----

PERSONAL PRECAUTIONS:

NO ACTION SHALL BE TAKEN INVOLVING ANY PERSONAL RISK OR WITHOUT SUITABLE TRAINING. EVACUATE SURROUNDING AREAS. KEEP UNNECESSARY AND UNPROTECTED PERSONNEL FROM ENTERING. DO NOT TOUCH OR WALK THROUGH SPILLED MATERIAL. PROVIDE ADEQUATE VENTILATION. WEAR APPROPRIATE RESPIRATOR WHEN VENTILATION IS INADEQUATE. PUT ON APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8).

ENVIRONMENTAL PRECAUTIONS:

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AVOID DISPERSAL OF SPILLED MATERIAL AND RUNOFF AND CONTACT WITH SOIL, WATERWAYS, DRAINS AND SEWERS. INFORM THE RELEVANT AUTHORITIES IF THE PRODUCT HAS CAUSED ENVIRONMENTAL POLLUTION (SEWERS, WATERWAYS, SOIL OR AIR).

LARGE SPILL:

MOVE CONTAINERS FROM SPILL AREA. APPROACH RELEASE FROM UPWIND. PREVENT ENTRY INTO SEWERS, WATER COURSES, BASEMENTS OR CONFINED AREAS. VACUUM OR SWEEP UP MATERIAL AND PLACE IN A DESIGNATED, LABELED WASTE CONTAINER. DISPOSE OF VIA A LICENSED WASTE DISPOSAL CONTRACTOR.

NOTE:

SEE SECTION 1 FOR EMERGENCY CONTACT INFORMATION AND SECTION 13 FOR WASTE DISPOSAL.

SMALL SPILL:

MOVE CONTAINERS FROM SPILL AREA. VACUUM OR SWEEP UP MATERIAL AND PLACE IN A DESIGNATED, LABELED WASTE CONTAINER. DISPOSE OF VIA A LICENSED WASTE DISPOSAL CONTRACTOR.

-----7. HANDLING AND STORAGE -----

HANDLING:

PUT ON APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8). EATING, DRINKING AND SMOKING SHOULD BE PROHIBITED IN AREAS WHERE THIS MATERIAL IS HANDLED, STORED AND PROCESSED. WORKERS SHOULD WASH HANDS AND FACE BEFORE EATING, DRINKING AND SMOKING. AVOID EXPOSURE DURING PREGNANCY. DO NOT GET IN EYES OR ON SKIN OR CLOTHING. DO NOT INGEST. USE ONLY WITH ADEQUATE VENTILATION. WEAR APPROPRIATE RESPIRATOR WHEN VENTILATION IS INADEQUATE. KEEP IN THE ORIGINAL CONTAINER OR APPROVED ALTERNATIVE CONTAINER. CONTAINERS SHOULD BE KEPT CLOSED WHEN NOT IN USE. EMPTY CONTAINERS RETAIN PRODUCT RESIDUE AND CAN BE HAZARDOUS. DO NOT REUSE CONTAINER.

STORAGE:

STORE IN ACCORDANCE WITH LOCAL REGULATIONS. STORE IN ORIGINAL CONTAINER PROTECTED FROM DIRECT SUNLIGHT IN A DRY, COOL AND WELL-VENTILATED AREA, AWAY FROM INCOMPATIBLE MATERIALS (SEE SECTION 10) AND FOOD AND DRINK. KEEP CONTAINER TIGHTLY CLOSED AND SEALED UNTIL READY FOR USE. CONTAINERS THAT HAVE BEEN OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE. DO NOT STORE IN UNLABELED CONTAINERS. USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION.

KEEP CONTAINER IN A COOL, WELL-VENTILATED AREA. KEEP CONTAINER TIGHTLY CLOSED AND SEALED UNTIL READY FOR USE. AVOID ALL POSSIBLE SOURCES OF IGNITION (SPARK OR FLAME).

-----8. EXPOSURE CONTROLS/PERSONAL PROTECTION -----

PRODUCT NAME

EXPOSURE LIMITS

TIN

OSHA PEL (UNITED STATES, 9/2005).
TWA: 2 MG/M3 8 HOUR(S).

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ACGIH TLV (UNITED STATES, 2/2010).
TWA: 2 MG/M3 8 HOUR(S).

NIOSH REL (UNITED STATES, 6/2009).

NOTES: NOTE:
THE REL AND PEL ALSO APPLY TO OTHER INORGANIC
TIN COMPOUNDS (AS Sn) EXCEPT TIN OXIDES.

TWA: 2 MG/M3 10 HOUR(S).

OSHA PEL (UNITED STATES, 5/2005).
TWA: 0.05 MG/M3 8 HOUR(S).

ACGIH TLV (UNITED STATES, 2/2010).
NOTES: AS Pb
TWA: 0.05 MG/M3, (AS Pb) 8 HOUR(S).

OSHA PEL (UNITED STATES, 6/2010).
NOTES: AS Pb
TWA: 50 (MICRO)G/M3, (AS Pb) 8 HOUR(S).

NIOSH REL (UNITED STATES, 6/2009).

NOTES:
SEE APPENDIX C - SUPPLEMENTAL EXPOSURE LIMITS

NOTE:
THE REL AND PEL ALSO APPLY TO OTHER LEAD
COMPOUNDS (AS Pb).

TWA: 0.05 MG/M3 10 HOUR(S).

LEAD

ADDITIVE
AIHA WEEL (UNITED STATES, 5/2010).
TWA: 10 MG/M3 8 HOUR(S).

CONSULT LOCAL AUTHORITIES FOR ACCEPTABLE EXPOSURE LIMITS.

RECOMMENDED MONITORING PROCEDURES:
IF THIS PRODUCT CONTAINS INGREDIENTS WITH EXPOSURE LIMITS, PERSONAL,
WORKPLACE ATMOSPHERE OR BIOLOGICAL MONITORING MAY BE REQUIRED TO DETERMINE
THE EFFECTIVENESS OF THE VENTILATION OR OTHER CONTROL MEASURES AND/OR THE
NECESSITY TO USE RESPIRATORY PROTECTIVE EQUIPMENT.

ENGINEERING MEASURES:
USE ONLY WITH ADEQUATE VENTILATION. USE PROCESS ENCLOSURES, LOCAL EXHAUST
VENTILATION OR OTHER ENGINEERING CONTROLS TO KEEP WORKER EXPOSURE TO
AIRBORNE CONTAMINANTS BELOW ANY RECOMMENDED OR STATUTORY LIMITS. PROCESSES
SHOULD BE DESIGNED TO MINIMIZE AIRBORNE AND SKIN EXPOSURE TO HAZARDOUS
SUBSTANCES.

HYGIENE MEASURES:

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WASH HANDS, FOREARMS AND FACE THOROUGHLY AFTER HANDLING CHEMICAL PRODUCTS, BEFORE EATING, SMOKING AND USING THE LAVATORY AND AT THE END OF THE WORKING PERIOD. APPROPRIATE TECHNIQUES SHOULD BE USED TO REMOVE POTENTIALLY CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE REUSING. ENSURE THAT EYEWASH STATIONS AND SAFETY SHOWERS ARE CLOSE TO THE WORKSTATION LOCATION. EATING, DRINKING AND SMOKING SHOULD BE PROHIBITED IN AREAS WHERE THIS MATERIAL IS HANDLED, STORED AND PROCESSED. REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE.

PERSONAL PROTECTION:

RESPIRATORY:

USE A PROPERLY FITTED, AIR-PURIFYING OR AIR-FED RESPIRATOR COMPLYING WITH NIOSH IF A RISK ASSESSMENT INDICATES THIS IS NECESSARY. RESPIRATOR SELECTION MUST BE BASED ON KNOWN OR ANTICIPATED EXPOSURE LEVELS, THE HAZARDS OF THE PRODUCT AND THE SAFE WORKING LIMITS OF THE SELECTED RESPIRATOR.

HANDS:

CHEMICAL-RESISTANT, IMPERVIOUS GLOVES COMPLYING WITH AN APPROVED STANDARD SHOULD BE WORN AT ALL TIMES WHEN HANDLING CHEMICAL PRODUCTS IF A RISK ASSESSMENT INDICATES THIS IS NECESSARY. THE USER MUST CHECK THAT THE FINAL CHOICE OF TYPE OF GLOVE SELECTED FOR HANDLING THIS PRODUCT IS THE MOST APPROPRIATE AND TAKES INTO ACCOUNT THE PARTICULAR CONDITIONS OF USE, AS INCLUDED IN THE USER'S RISK ASSESSMENT.

EYES:

AVOID CONTACT WITH EYES. SAFETY EYEWEAR SHOULD BE USED WHEN THERE IS A LIKELIHOOD OF EXPOSURE.

SKIN:

AVOID CONTACT WITH SKIN AND CLOTHING. WEAR PROTECTIVE CLOTHING. BODY GARMENTS USED SHOULD BE BASED UPON THE TASK BEING PERFORMED (E.G., LAB COAT, CHEMICAL RESISTANT PROTECTIVE SUIT, SLEEVELETS, SYNTHETIC APRON, GAUNTLETS) TO AVOID EXPOSED SKIN SURFACES. WASH CONTAMINATED CLOTHING THOROUGHLY WITH WATER BEFORE REMOVING IT, OR WEAR GLOVES.

ENVIRONMENTAL EXPOSURE CONTROLS:

EMISSIONS FROM VENTILATION OR WORK PROCESS EQUIPMENT SHOULD BE CHECKED TO ENSURE THEY COMPLY WITH THE REQUIREMENTS OF ENVIRONMENTAL PROTECTION LEGISLATION. IN SOME CASES, FUME SCRUBBERS, FILTERS OR ENGINEERING MODIFICATIONS TO THE PROCESS EQUIPMENT WILL BE NECESSARY TO REDUCE EMISSIONS TO ACCEPTABLE LEVELS.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: SOLID.

FLASH POINT: NOT AVAILABLE.

AUTO-IGNITION TEMPERATURE: NOT AVAILABLE.

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FLAMMABLE LIMITS: NOT AVAILABLE.

COLOR: GRAY.

ODOR: NONE.

pH: NOT AVAILABLE.

BOILING/CONDENSATION POINT: NOT AVAILABLE.

MELTING/FREEZING POINT: NOT AVAILABLE.

VAPOR PRESSURE: NOT AVAILABLE.

VAPOR DENSITY: NOT AVAILABLE.

ODOR THRESHOLD: NOT AVAILABLE.

EVAPORATION RATE: NOT AVAILABLE.

VOC: 25.5 G/L

SOLUBILITY:

INSOLUBLE IN THE FOLLOWING MATERIALS: COLD WATER AND HOT WATER.

-----10. STABILITY AND REACTIVITY -----

STABILITY: THE PRODUCT IS STABLE.

CONDITIONS TO AVOID: NO SPECIFIC DATA.

INCOMPATIBILITY WITH VARIOUS SUBSTANCES:

REACTIVE WITH OXIDIZING AGENTS, REDUCING AGENTS, ACIDS, ALKALIS.
CHLORINE, PEROXIDES

HAZARDOUS DECOMPOSITION PRODUCTS:

UNDER NORMAL CONDITIONS OF STORAGE AND USE, HAZARDOUS DECOMPOSITION PRODUCTS
SHOULD NOT BE PRODUCED.

OTHER HAZARDOUS DECOMPOSITION PRODUCTS: METAL OXIDES, TOXIC, FUMES

HAZARDOUS POLYMERIZATION:

UNDER NORMAL CONDITIONS OF STORAGE AND USE, HAZARDOUS POLYMERIZATION WILL
NOT OCCUR.

-----11. TOXICOLOGICAL INFORMATION -----

ACUTE TOXICITY:

PRODUCT/INGREDIENT NAME	RESULT	SPECIES	DOSE	EXPOSURE
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ADDITIVE	LD50 ORAL	MOUSE	11 G/KG
	LD50 ORAL	RAT	8471 MG/KG
	LDLO ORAL	RABBIT	10 G/KG

CARCINOGENICITY:

CLASSIFICATION:

PRODUCT/INGREDIENT NAME	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
LEAD	A3	2B			POSSIBLE	

MUTAGENICITY:

PRODUCT/INGREDIENT NAME	TEST	EXPERIMENT	RESULT
LEAD		MAMMALIAN-ANIMAL	EQUIVOCAL
ADDITIVE		IN VITRO; MAMMALIAN-HUMAN; GERM	POSITIVE

TERATOGENICITY:

PRODUCT/INGREDIENT NAME	RESULT	SPECIES	DOSE	EXPOSURE
LEAD	EQUIVOCAL - ORAL	MAMMAL - SPECIES UNSPECIFIED	2118 MG/KG	
	EQUIVOCAL - INHALATION	RAT	10 MG/M3	24 HOURS PER DAY

REPRODUCTIVE TOXICITY:

PRODUCT/ INGREDIENT NAME	MATERNAL TOXICITY	FERTILITY	DEVELOPMENT TOXIN	SPECIES	DOSE	EXPOSURE
LEAD			EQUIVOCAL	RAT- FEMALE	ORAL: 520 MG/KG	
			EQUIVOCAL	RAT- FEMALE	INHALATION: 3 MG/M3	24 HOURS PER DAY
	EQUIVOCAL			MOUSE - FEMALE	ORAL: 300 MG/KG	
		EQUIVOCAL		MOUSE	ORAL: 4099.2 MG/KG	

ALPHA HAS NOT CONDUCTED SPECIFIC STUDIES ON THE TOXICITY OF THIS PRODUCT.

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-----12. ECOLOGICAL INFORMATION -----

AQUATIC ECOTOXICITY:

PRODUCT/INGREDIENT NAME	RESULT	SPECIES	EXPOSURE
LEAD	ACUTE LC50: 933 TO 1200 (MICRO)G/L MARINE WATER	CRUSTACEANS - PENAEUS CHINENSIS	48 HOURS
	ACUTE LC50: 530 (MICRO)G/L FRESH WATER	DAPHNIA - CERIODAPHNIA RETICULATA - <4 HOURS	48 HOURS
	ACUTE LC50: 0.44 PPM FRESH WATER	FISH - CYPRINUS CARPIO - JUVENILE (FLEDGLING, HATCHLING, WEANLING) - 3.5 CM	96 HOURS
UREA	ACUTE EC50: 3910000 (MICRO)G/L FRESH WATER	DAPHNIA - DAPHNIA MAGNA - NEONATE - <24 HOURS	48 HOURS
	ACUTE LC50: >1000 MG/L MARINE WATER	CRUSTACEANS - CHAETOGAMMARUS MARINUS- YOUNG - 5 MM	48 HOURS
	ACUTE LC50: 5000 (MICRO)G/L FRESH WATER	FISH - COLISA FASCIATA - FINGERLING	96 HOURS

-----13. DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL:

THE GENERATION OF WASTE SHOULD BE AVOIDED OR MINIMIZED WHEREVER POSSIBLE. EMPTY CONTAINERS OR LINERS MAY RETAIN SOME PRODUCT RESIDUES. THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY. DISPOSE OF SURPLUS AND NON-RECYCLABLE PRODUCTS VIA A LICENSED WASTE DISPOSAL CONTRACTOR. DISPOSAL OF THIS PRODUCT, SOLUTIONS AND ANY BY-PRODUCTS SHOULD AT ALL TIMES COMPLY WITH THE REQUIREMENTS OF ENVIRONMENTAL PROTECTION AND WASTE DISPOSAL LEGISLATION AND ANY REGIONAL LOCAL AUTHORITY REQUIREMENTS. AVOID DISPERSAL OF SPILLED MATERIAL AND RUNOFF AND CONTACT WITH SOIL, WATERWAYS, DRAINS AND SEWERS.

DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL AND LOCAL LAWS AND REGULATIONS.

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REFER TO SECTION 7: HANDLING AND STORAGE AND SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION FOR ADDITIONAL HANDLING INFORMATION AND PROTECTION OF EMPLOYEES.

-----14. TRANSPORT INFORMATION -----

REGULATORY INFORMATION	UN NUMBER	PROPER SHIPPING NAME	CLASSES	PG*	LABEL	ADDITIONAL INFORMATION
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DOT CLASSIFICATION NOT REGULATED.

PG*: PACKING GROUP

-----15. REGULATORY INFORMATION -----

UNITED STATES:

HCS CLASSIFICATION:
TOXIC MATERIAL
IRRITATING MATERIAL
CARCINOGEN
TARGET ORGAN EFFECTS

U.S. FEDERAL REGULATIONS:

TSCA 5(A)2 PROPOSED SIGNIFICANT NEW USE RULES: NO PRODUCTS WERE FOUND.
TSCA 5(A)2 FINAL SIGNIFICANT NEW USE RULES: ETHANOL, 2-METHOXY-
TSCA 12(B) ONE-TIME EXPORT: NO PRODUCTS WERE FOUND.

UNITED STATES INVENTORY (TSCA 8B): ALL COMPONENTS ARE LISTED OR EXEMPTED.

SARA 313:

PRODUCT NAME	CAS NUMBER	CONCENTRATION
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FORM R - REPORTING REQUIREMENTS

LEAD	7439-92-1	40-50
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SUPPLIER NOTIFICATION

LEAD	7439-92-1	40-50
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CALIFORNIA PROP. 65:

WARNING:

THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

CANADA:

B A R N E S D I S T R I B U T I O N

WHMIS (CANADA):

CLASS D-2A: MATERIAL CAUSING OTHER TOXIC EFFECTS (VERY TOXIC).

CANADA INVENTORY: ALL COMPONENTS ARE LISTED OR EXEMPTED.

INTERNATIONAL LISTS:

CHINA INVENTORY (IECSC): ALL COMPONENTS ARE LISTED OR EXEMPTED.

EUROPE INVENTORY: ALL COMPONENTS ARE LISTED OR EXEMPTED.

AUSTRALIA INVENTORY (AICS): ALL COMPONENTS ARE LISTED OR EXEMPTED.

JAPAN INVENTORY (ENCS): ALL COMPONENTS ARE LISTED OR EXEMPTED.

KOREA INVENTORY (KECI): ALL COMPONENTS ARE LISTED OR EXEMPTED.

PHILIPPINES INVENTORY (PICCS): ALL COMPONENTS ARE LISTED OR EXEMPTED.

-----16. OTHER INFORMATION -----

DEFINITION OF TERMS:

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

CEILING: MAXIMUM EXPOSURE LIMIT DEFINED BY OSHA

CAS: CHEMICAL ABSTRACT SERVICE

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

NIOSH: NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

NTP: NATIONAL TOXICOLOGY PROGRAM

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

PEL: PERMISSIBLE EXPOSURE LIMIT

REL: RECOMMENDED EXPOSURE LIMIT

RTK: RIGHT TO KNOW

SARA: SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT

STEL: SHORT TERM EXPOSURE LIMIT

TLV: ACGIH THRESHOLD LIMIT VALUE

TLV-C: ACGIH THRESHOLD LIMIT VALUE, CEILING

TRADE SECRET: CLAIMED AS ALLOWED UNDER 29 CFR SUBSECTION 1910.1200

TSCA: TOXIC SUBSTANCES CONTROL ACT

PPE: PERSONAL PROTECTION EQUIPMENT

CEPA: CANADIAN ENVIRONMENTAL PROTECTION ACT

DSL: DOMESTIC SUBSTANCE LIST

NDSL: NON-DOMESTIC SUBSTANCE LIST

NSN: NEW SUBSTANCE NOTIFICATION RULES

DISCLAIMER:

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OF IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. ADDITIONALLY, COOKSON ELECTRONICS ASSUMES NO RESPONSIBILITY FOR INJURY TO THE VENDEE OR THIRD PERSONS PROXIMATELY CAUSED BY THE MATERIAL EVEN IF REASONABLE SAFETY PROCEDURES ARE FOLLOWED. FURTHERMORE, VENDEE ASSUMES THE RISK IN HIS USE OF THE MATERIAL.

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Synonyms: 21577
MATERIAL SAFETY DATA SHEET

ALPHA

MATERIAL SAFETY DATA SHEET

EMERGENCY PHONE:
ALPHA CHEMTREC #5591

US & CANADA: 800 424-9300

MEXICO:
01 800 022 1400
(55) 5559 1588

NFPA:
HEALTH 2
FLAMMABILITY 1
INSTABILITY 0
SPECIAL

HEALTH 2
FLAMMABILITY 1
PHYSICAL HAZARDS 0
PERSONAL PROTECTION

-----1. PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME: SOLDER WIRE CORED 50Sn/50Pb ALLOY, RA-32 FLUX

PRODUCT CODE: M050RA32

MATERIAL USES: SPECIALTY ASSEMBLY MATERIALS FOR THE ELECTRONICS INDUSTRIES

MANUFACTURER:
COOKSON ELECTRONICS
109 CORPORATE BLVD.
SOUTH PLAINFIELD, NJ 07080

TOLL FREE: (800) 367-5460

MAIN PHONE: (908) 791-3000

FAX: (908)791-3090

WWW.ALPHAMETALS.COM

COOKSON ELECTRONICS MEXICO, S.A. DE C.V
AVENIDA NAFTA NO. 800
PARQUE INDUSTRIAL STIVA AEROPUERTO
APODACA, NUEVO LEON, C.P. 66600

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MEXICO
WWW.COOKSONELECTRONICS.COM

CUSTOMER SERVICE: (814) 946-1611

VALIDATION DATE: 6/11/2011.

SUPERSEDES DATE: 4/23/2010.

PREPARED BY:
T. VALVERDE
(203)-799-4940

-----2. HAZARDS IDENTIFICATION -----

PHYSICAL STATE: SOLID.

ODOR: NONE.

OSHA/HCS STATUS:
THIS MATERIAL IS CONSIDERED HAZARDOUS BY THE OSHA HAZARD COMMUNICATION
STANDARD (29 CFR 1910.1200).

EMERGENCY OVERVIEW:

| WARNING!

| TOXIC BY INHALATION AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY
| SYSTEM AND SKIN. MAY CAUSE SENSITIZATION BY SKIN CONTACT. DO NOT INGEST.
| DO NOT GET ON SKIN OR CLOTHING. AVOID CONTACT WITH EYES. CONTAINS MATERIAL
| THAT CAN CAUSE TARGET ORGAN DAMAGE. CONTAINS MATERIAL WHICH MAY CAUSE
| CANCER. RISK OF CANCER DEPENDS ON DURATION AND LEVEL OF EXPOSURE. CONTAINS
| MATERIAL WHICH MAY CAUSE HERITABLE GENETIC EFFECTS, BASED ON ANIMAL DATA.
| CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA.
| CONTAINS MATERIAL WHICH CAN CAUSE DEVELOPMENTAL ABNORMALITIES. AVOID
| EXPOSURE DURING PREGNANCY. CONTAINS MATERIAL WHICH CAN IMPAIR MALE
| FERTILITY. CONTAINS MATERIAL WHICH CAN IMPAIR FEMALE FERTILITY. USE ONLY
| WITH ADEQUATE VENTILATION. KEEP CONTAINER TIGHTLY CLOSED AND SEALED UNTIL
| READY FOR USE. WASH THOROUGHLY AFTER HANDLING.

ROUTES OF ENTRY: DERMAL CONTACT. EYE CONTACT. INHALATION. INGESTION.

POTENTIAL ACUTE HEALTH EFFECTS:

INHALATION:
TOXIC BY INHALATION. CAN CAUSE TARGET ORGAN DAMAGE. IRRITATING TO
RESPIRATORY SYSTEM.

| INGESTION:
| TOXIC IF SWALLOWED. CAN CAUSE TARGET ORGAN DAMAGE. INGESTION MAY CAUSE
| GASTROINTESTINAL IRRITATION AND DIARRHEA.

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SKIN:

IRRITATING TO SKIN. MAY CAUSE SENSITIZATION BY SKIN CONTACT. SKIN INFLAMMATION IS CHARACTERIZED BY ITCHING, SCALING, REDDENING OR, OCCASIONALLY, BLISTERING. PROLONGED OR REPEATED CONTACT MAY CAUSE DERMATITIS. ONCE SENSITIZED, A SEVERE ALLERGIC REACTION MAY OCCUR WHEN SUBSEQUENTLY EXPOSED TO VERY LOW LEVELS. IN THE EVENT OF ANY COMPLAINTS OR SYMPTOMS, AVOID FURTHER EXPOSURE. PERSONS WITH A HISTORY OF SKIN SENSITIZATION PROBLEMS SHOULD NOT BE EMPLOYED IN ANY PROCESS IN WHICH THIS PRODUCT IS USED.

EYES:

IRRITATING TO EYES. ADVERSE SYMPTOMS MAY INCLUDE THE FOLLOWING: REDNESS, ITCHING, SWELLING, PAIN

POTENTIAL CHRONIC HEALTH EFFECTS:

CHRONIC EFFECTS:

ADVERSE SYMPTOMS MAY INCLUDE THE FOLLOWING:

LEAD:

POISON!

OTHER ADVERSE EFFECTS:

ABDOMINAL CRAMPS AND PAIN, NAUSEA OR VOMITING, HEADACHE, MUSCLE WEAKNESS, METALLIC TASTE, LOSS OF APPETITE, INSOMNIA, DIZZINESS/VERTIGO, "LEAD LINE" ON GUMS, HIGH LEAD LEVELS IN BLOOD AND URINE, LOSS OF CONSCIOUSNESS OR COMA AND DEATH.

CHRONIC EFFECTS:

IRRITABILITY, VISUAL DISTURBANCES, BLOOD PRESSURE ELEVATION AND DISCOLORATION OF: SKIN.

TIN:

PROLONGED OR REPEATED EXPOSURE MAY CAUSE BENIGN PNEUMOCONIOSIS (STANNOSIS).

ROSIN/RESIN:

MAY CAUSE ALLERGIC SKIN REACTIONS WITH REPEATED EXPOSURE. PROLONGED INHALATION OF FUMES MAY CAUSE RESPIRATORY SENSITIZATION.

TARGET ORGANS:

CONTAINS MATERIAL WHICH MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS:
BLOOD, KIDNEYS, LUNGS, THE REPRODUCTIVE SYSTEM, MUCOUS MEMBRANES,
PERIPHERAL NERVOUS SYSTEM, GASTROINTESTINAL TRACT, UPPER RESPIRATORY
TRACT, SKIN, EYES, CENTRAL NERVOUS SYSTEM (CNS).

CARCINOGENICITY:

CONTAINS MATERIAL WHICH MAY CAUSE CANCER. RISK OF CANCER DEPENDS ON DURATION AND LEVEL OF EXPOSURE.

MUTAGENICITY:

CONTAINS MATERIAL WHICH MAY CAUSE HERITABLE GENETIC EFFECTS, BASED ON ANIMAL

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DATA.

TERATOGENICITY:

CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA.

DEVELOPMENTAL EFFECTS:

CONTAINS MATERIAL WHICH CAN CAUSE DEVELOPMENTAL ABNORMALITIES.

FERTILITY EFFECTS:

CONTAINS MATERIAL WHICH CAN IMPAIR MALE FERTILITY. CONTAINS MATERIAL WHICH CAN IMPAIR FEMALE FERTILITY.

CALIFORNIA PROP. 65:

WARNING:

THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:

PRE-EXISTING RESPIRATORY, SKIN AND DIGESTIVE DISORDERS AND DISORDERS INVOLVING ANY OTHER TARGET ORGANS MENTIONED IN THIS MSDS AS BEING AT RISK MAY BE AGGRAVATED BY OVER-EXPOSURE TO THIS PRODUCT. PERSONS WITH A HISTORY OF SKIN SENSITIZATION PROBLEMS SHOULD NOT BE EMPLOYED IN ANY PROCESS IN WHICH THIS PRODUCT IS USED.

-----3. COMPOSITION/INFORMATION ON INGREDIENTS -----

NAME	CAS NUMBER	% BY WEIGHT
TIN	7440-31-5	40-50
LEAD	7439-92-1	40-50
ROSIN/RESIN		1-5

ANY INGREDIENT NOT LISTED IN SECTION 3 IS NON-REGULATED OR PRESENT IN THE PRODUCT IN CONCENTRATIONS BELOW LEGAL DISCLOSURE LIMITS.

-----4. FIRST AID MEASURES -----

EYE CONTACT:

CHECK FOR AND REMOVE ANY CONTACT LENSES. GET MEDICAL ATTENTION IF IRRITATION OCCURS. IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR AT LEAST 30 MINUTES, KEEPING EYELIDS OPEN.

SKIN CONTACT:

FLUSH CONTAMINATED SKIN WITH PLENTY OF WATER. REMOVE CONTAMINATED CLOTHING AND SHOES. CONTINUE TO RINSE FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. MAY CAUSE SENSITIZATION BY SKIN CONTACT. ONCE SENSITIZED, A SEVERE ALLERGIC REACTION MAY OCCUR WHEN SUBSEQUENTLY EXPOSED TO VERY LOW LEVELS. WASH CONTAMINATED CLOTHING BEFORE REUSE. CLEAN SHOES THOROUGHLY BEFORE REUSE. IN

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CASE OF CONTACT, IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.

INHALATION:

GET MEDICAL ATTENTION IMMEDIATELY. MOVE EXPOSED PERSON TO FRESH AIR. IF IT IS SUSPECTED THAT FUMES ARE STILL PRESENT, THE RESCUER SHOULD WEAR AN APPROPRIATE MASK OR SELF-CONTAINED BREATHING APPARATUS. KEEP PERSON WARM AND AT REST. IF NOT BREATHING, IF BREATHING IS IRREGULAR OR IF RESPIRATORY ARREST OCCURS, PROVIDE ARTIFICIAL RESPIRATION OR OXYGEN BY TRAINED PERSONNEL. IT MAY BE DANGEROUS TO THE PERSON PROVIDING AID TO GIVE MOUTH-TO-MOUTH RESUSCITATION. IF UNCONSCIOUS, PLACE IN RECOVERY POSITION AND GET MEDICAL ATTENTION IMMEDIATELY. MAINTAIN AN OPEN AIRWAY. LOOSEN TIGHT CLOTHING SUCH AS A COLLAR, TIE, BELT OR WAISTBAND.

INGESTION:

GET MEDICAL ATTENTION IMMEDIATELY. WASH OUT MOUTH WITH WATER. REMOVE DENTURES IF ANY. MOVE EXPOSED PERSON TO FRESH AIR. KEEP PERSON WARM AND AT REST. DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. IF VOMITING OCCURS, THE HEAD SHOULD BE KEPT LOW SO THAT VOMIT DOES NOT ENTER THE LUNGS. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IF UNCONSCIOUS, PLACE IN RECOVERY POSITION AND GET MEDICAL ATTENTION IMMEDIATELY. MAINTAIN AN OPEN AIRWAY. LOOSEN TIGHT CLOTHING SUCH AS A COLLAR, TIE, BELT OR WAISTBAND. IF NOT BREATHING, IF BREATHING IS IRREGULAR OR IF RESPIRATORY ARREST OCCURS, PROVIDE ARTIFICIAL RESPIRATION OR OXYGEN BY TRAINED PERSONNEL.

PROTECTION OF FIRST-AIDERS:

NO ACTION SHALL BE TAKEN INVOLVING ANY PERSONAL RISK OR WITHOUT SUITABLE TRAINING. IT MAY BE DANGEROUS TO THE PERSON PROVIDING AID TO GIVE MOUTH-TO-MOUTH RESUSCITATION. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION. IF IT IS SUSPECTED THAT FUMES ARE STILL PRESENT, THE RESCUER SHOULD WEAR AN APPROPRIATE MASK OR SELF-CONTAINED BREATHING APPARATUS. WASH CONTAMINATED CLOTHING THOROUGHLY WITH WATER BEFORE REMOVING IT, OR WEAR GLOVES.

-----5. FIRE-FIGHTING MEASURES -----

FLAMMABILITY OF THE PRODUCT: NO SPECIFIC FIRE OR EXPLOSION HAZARD.

EXTINGUISHING MEDIA:

SUITABLE: USE AN EXTINGUISHING AGENT SUITABLE FOR THE SURROUNDING FIRE.
NOT SUITABLE: NONE KNOWN.

SPECIAL EXPOSURE HAZARDS:

PROMPTLY ISOLATE THE SCENE BY REMOVING ALL PERSONS FROM THE VICINITY OF THE INCIDENT IF THERE IS A FIRE. NO ACTION SHALL BE TAKEN INVOLVING ANY PERSONAL RISK OR WITHOUT SUITABLE TRAINING.

HAZARDOUS COMBUSTION PRODUCTS: METAL OXIDE/OXIDES

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:

FIRE-FIGHTERS SHOULD WEAR APPROPRIATE PROTECTIVE EQUIPMENT AND

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SELF-CONTAINED BREATHING APPARATUS (SCBA) WITH A FULL FACE-PIECE OPERATED IN POSITIVE PRESSURE MODE.

-----6. ACCIDENTAL RELEASE MEASURES -----

PERSONAL PRECAUTIONS:

NO ACTION SHALL BE TAKEN INVOLVING ANY PERSONAL RISK OR WITHOUT SUITABLE TRAINING. EVACUATE SURROUNDING AREAS. KEEP UNNECESSARY AND UNPROTECTED PERSONNEL FROM ENTERING. DO NOT TOUCH OR WALK THROUGH SPILLED MATERIAL. PROVIDE ADEQUATE VENTILATION. WEAR APPROPRIATE RESPIRATOR WHEN VENTILATION IS INADEQUATE. PUT ON APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8).

ENVIRONMENTAL PRECAUTIONS:

AVOID DISPERSAL OF SPILLED MATERIAL AND RUNOFF AND CONTACT WITH SOIL, WATERWAYS, DRAINS AND SEWERS. INFORM THE RELEVANT AUTHORITIES IF THE PRODUCT HAS CAUSED ENVIRONMENTAL POLLUTION (SEWERS, WATERWAYS, SOIL OR AIR).

LARGE SPILL:

MOVE CONTAINERS FROM SPILL AREA. APPROACH RELEASE FROM UPWIND. PREVENT ENTRY INTO SEWERS, WATER COURSES, BASEMENTS OR CONFINED AREAS. VACUUM OR SWEEP UP MATERIAL AND PLACE IN A DESIGNATED, LABELED WASTE CONTAINER. DISPOSE OF VIA A LICENSED WASTE DISPOSAL CONTRACTOR.

NOTE:

SEE SECTION 1 FOR EMERGENCY CONTACT INFORMATION AND SECTION 13 FOR WASTE DISPOSAL.

SMALL SPILL:

MOVE CONTAINERS FROM SPILL AREA. VACUUM OR SWEEP UP MATERIAL AND PLACE IN A DESIGNATED, LABELED WASTE CONTAINER. DISPOSE OF VIA A LICENSED WASTE DISPOSAL CONTRACTOR.

-----7. HANDLING AND STORAGE -----

HANDLING:

PUT ON APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8). EATING, DRINKING AND SMOKING SHOULD BE PROHIBITED IN AREAS WHERE THIS MATERIAL IS HANDLED, STORED AND PROCESSED. WORKERS SHOULD WASH HANDS AND FACE BEFORE EATING, DRINKING AND SMOKING. PERSONS WITH A HISTORY OF SKIN SENSITIZATION PROBLEMS SHOULD NOT BE EMPLOYED IN ANY PROCESS IN WHICH THIS PRODUCT IS USED. AVOID EXPOSURE DURING PREGNANCY. DO NOT GET IN EYES OR ON SKIN OR CLOTHING. DO NOT INGEST. USE ONLY WITH ADEQUATE VENTILATION. WEAR APPROPRIATE RESPIRATOR WHEN VENTILATION IS INADEQUATE. KEEP IN THE ORIGINAL CONTAINER OR AN APPROVED ALTERNATIVE MADE FROM A COMPATIBLE MATERIAL, KEPT TIGHTLY CLOSED WHEN NOT IN USE. EMPTY CONTAINERS RETAIN PRODUCT RESIDUE AND CAN BE HAZARDOUS. DO NOT REUSE CONTAINER.

STORAGE:

STORE IN ACCORDANCE WITH LOCAL REGULATIONS. STORE IN ORIGINAL CONTAINER PROTECTED FROM DIRECT SUNLIGHT IN A DRY, COOL AND WELL-VENTILATED AREA, AWAY

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FROM INCOMPATIBLE MATERIALS (SEE SECTION 10) AND FOOD AND DRINK. KEEP CONTAINER TIGHTLY CLOSED AND SEALED UNTIL READY FOR USE. CONTAINERS THAT HAVE BEEN OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE. DO NOT STORE IN UNLABELED CONTAINERS. USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION.

KEEP CONTAINER IN A COOL, WELL-VENTILATED AREA. KEEP CONTAINER TIGHTLY CLOSED AND SEALED UNTIL READY FOR USE. AVOID ALL POSSIBLE SOURCES OF IGNITION (SPARK OR FLAME).

-----8. EXPOSURE CONTROLS/PERSONAL PROTECTION -----

PRODUCT NAME	EXPOSURE LIMITS
TIN	OSHA PEL (UNITED STATES, 9/2005). TWA: 2 MG/M3 8 HOUR(S). ACGIH TLV (UNITED STATES, 2/2010). TWA: 2 MG/M3 8 HOUR(S). NIOSH REL (UNITED STATES, 6/2009). NOTES: NOTE: THE REL AND PEL ALSO APPLY TO OTHER INORGANIC TIN COMPOUNDS (AS Sn) EXCEPT TIN OXIDES. TWA: 2 MG/M3 10 HOUR(S).
LEAD	OSHA PEL (UNITED STATES, 5/2005). TWA: 0.05 MG/M3 8 HOUR(S). ACGIH TLV (UNITED STATES, 2/2010). NOTES: AS Pb TWA: 0.05 MG/M3, (AS Pb) 8 HOUR(S). OSHA PEL (UNITED STATES, 6/2010). NOTES: AS Pb TWA: 50 (MICRO)G/M3, (AS Pb) 8 HOUR(S). NIOSH REL (UNITED STATES, 6/2009). NOTES: SEE APPENDIX C - SUPPLEMENTAL EXPOSURE LIMITS NOTE: THE REL AND PEL ALSO APPLY TO OTHER LEAD COMPOUNDS (AS Pb). TWA: 0.05 MG/M3 10 HOUR(S).
ROSIN/RESIN	OSHA PEL 1989 (UNITED STATES, 3/1989). TWA: 0.1 MG/M3, (MEASURED AS FORMALDEHYDE) 8 HOUR(S). NIOSH REL (UNITED STATES, 6/2009). TWA: 0.1 MG/M3, (AS FORMALDEHYDE) 10 HOUR(S).

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CONSULT LOCAL AUTHORITIES FOR ACCEPTABLE EXPOSURE LIMITS.

RECOMMENDED MONITORING PROCEDURES:

IF THIS PRODUCT CONTAINS INGREDIENTS WITH EXPOSURE LIMITS, PERSONAL, WORKPLACE ATMOSPHERE OR BIOLOGICAL MONITORING MAY BE REQUIRED TO DETERMINE THE EFFECTIVENESS OF THE VENTILATION OR OTHER CONTROL MEASURES AND/OR THE NECESSITY TO USE RESPIRATORY PROTECTIVE EQUIPMENT.

ENGINEERING MEASURES:

USE ONLY WITH ADEQUATE VENTILATION. USE PROCESS ENCLOSURES, LOCAL EXHAUST VENTILATION OR OTHER ENGINEERING CONTROLS TO KEEP WORKER EXPOSURE TO AIRBORNE CONTAMINANTS BELOW ANY RECOMMENDED OR STATUTORY LIMITS. PROCESSES SHOULD BE DESIGNED TO MINIMIZE AIRBORNE AND SKIN EXPOSURE TO HAZARDOUS SUBSTANCES.

HYGIENE MEASURES:

WASH HANDS, FOREARMS AND FACE THOROUGHLY AFTER HANDLING CHEMICAL PRODUCTS, BEFORE EATING, SMOKING AND USING THE LAVATORY AND AT THE END OF THE WORKING PERIOD. APPROPRIATE TECHNIQUES SHOULD BE USED TO REMOVE POTENTIALLY CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE REUSING. ENSURE THAT EYEWASH STATIONS AND SAFETY SHOWERS ARE CLOSE TO THE WORKSTATION LOCATION. EATING, DRINKING AND SMOKING SHOULD BE PROHIBITED IN AREAS WHERE THIS MATERIAL IS HANDLED, STORED AND PROCESSED. TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE.

PERSONAL PROTECTION:

RESPIRATORY:

USE A PROPERLY FITTED, AIR-PURIFYING OR AIR-FED RESPIRATOR COMPLYING WITH NIOSH IF A RISK ASSESSMENT INDICATES THIS IS NECESSARY. RESPIRATOR SELECTION MUST BE BASED ON KNOWN OR ANTICIPATED EXPOSURE LEVELS, THE HAZARDS OF THE PRODUCT AND THE SAFE WORKING LIMITS OF THE SELECTED RESPIRATOR. RISK ASSESSMENTS SHOULD BE COMPLETED BY A CERTIFIED INDUSTRIAL HYGIENIST.

HANDS:

CHEMICAL-RESISTANT, IMPERVIOUS GLOVES COMPLYING WITH AN APPROVED STANDARD SHOULD BE WORN AT ALL TIMES WHEN HANDLING CHEMICAL PRODUCTS IF A RISK ASSESSMENT INDICATES THIS IS NECESSARY. THE USER MUST CHECK THAT THE FINAL CHOICE OF TYPE OF GLOVE SELECTED FOR HANDLING THIS PRODUCT IS THE MOST APPROPRIATE AND TAKES INTO ACCOUNT THE PARTICULAR CONDITIONS OF USE, AS INCLUDED IN THE USER'S RISK ASSESSMENT. RISK ASSESSMENTS SHOULD BE COMPLETED BY A CERTIFIED INDUSTRIAL HYGIENIST.

EYES:

AVOID CONTACT WITH EYES. SAFETY EYEWEAR SHOULD BE USED WHEN THERE IS A LIKELIHOOD OF EXPOSURE.

SKIN:

AVOID CONTACT WITH SKIN AND CLOTHING. WEAR SUITABLE PROTECTIVE CLOTHING. BODY GARMENTS USED SHOULD BE BASED UPON THE TASK BEING PERFORMED

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(E.G., LAB COAT, CHEMICAL RESISTANT PROTECTIVE SUIT, SLEEVELETS, SYNTHETIC APRON, GAUNTLETS) TO AVOID EXPOSED SKIN SURFACES. WASH CONTAMINATED CLOTHING THOROUGHLY WITH WATER BEFORE REMOVING IT, OR WEAR GLOVES.

ENVIRONMENTAL EXPOSURE CONTROLS:

EMISSIONS FROM VENTILATION OR WORK PROCESS EQUIPMENT SHOULD BE CHECKED TO ENSURE THEY COMPLY WITH THE REQUIREMENTS OF ENVIRONMENTAL PROTECTION LEGISLATION. IN SOME CASES, FUME SCRUBBERS, FILTERS OR ENGINEERING MODIFICATIONS TO THE PROCESS EQUIPMENT WILL BE NECESSARY TO REDUCE EMISSIONS TO ACCEPTABLE LEVELS.

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: SOLID.

FLASH POINT: NOT AVAILABLE.

AUTO-IGNITION TEMPERATURE: NOT AVAILABLE.

FLAMMABLE LIMITS: NOT AVAILABLE.

COLOR: GRAY.

ODOR: NONE.

pH: NOT AVAILABLE.

BOILING/CONDENSATION POINT: NOT AVAILABLE.

MELTING/FREEZING POINT: NOT AVAILABLE.

VAPOR PRESSURE: NOT AVAILABLE.

VAPOR DENSITY: NOT AVAILABLE.

ODOR THRESHOLD: NOT AVAILABLE.

EVAPORATION RATE: NOT AVAILABLE.

VOC: 1.8 G/L

SOLUBILITY:

INSOLUBLE IN THE FOLLOWING MATERIALS: COLD WATER AND HOT WATER.

-----10. STABILITY AND REACTIVITY -----

STABILITY: THE PRODUCT IS STABLE.

CONDITIONS TO AVOID: NO SPECIFIC DATA.

INCOMPATIBILITY WITH VARIOUS SUBSTANCES:

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REACTIVE WITH OXIDIZING AGENTS, REDUCING AGENTS, ACIDS, ALKALIS.
 CHLORINE, PEROXIDES

HAZARDOUS DECOMPOSITION PRODUCTS:
 UNDER NORMAL CONDITIONS OF STORAGE AND USE, HAZARDOUS DECOMPOSITION
 PRODUCTS SHOULD NOT BE PRODUCED.

OTHER HAZARDOUS DECOMPOSITION PRODUCTS: METAL OXIDES, TOXIC, FUMES

HAZARDOUS POLYMERIZATION:
 UNDER NORMAL CONDITIONS OF STORAGE AND USE, HAZARDOUS POLYMERIZATION WILL
 NOT OCCUR.

-----11. TOXICOLOGICAL INFORMATION -----

ACUTE TOXICITY:

PRODUCT/INGREDIENT NAME	RESULT	SPECIES	DOSE	EXPOSURE
ROSIN/RESIN	LD50 ORAL	MOUSE	2.2 G/KG	
	LD50 ORAL	RAT	3 G/KG	

CARCINOGENICITY:

CLASSIFICATION:

PRODUCT/INGREDIENT NAME	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
LEAD	A3	2B				POSSIBLE
ROSIN/RESIN				+		

MUTAGENICITY:

PRODUCT/INGREDIENT NAME	TEST	EXPERIMENT	RESULT
LEAD		MAMMALIAN-ANIMAL	EQUIVOCAL

TERATOGENICITY:

PRODUCT/INGREDIENT NAME	RESULT	SPECIES	DOSE	EXPOSURE
LEAD	EQUIVOCAL - ORAL	MAMMAL - SPECIES UNSPECIFIED	2118 MG/KG	
	EQUIVOCAL - INHALATION	RAT	10 MG/M3	24 HOURS PER DAY

REPRODUCTIVE TOXICITY:

PRODUCT/ INGREDIENT NAME	MATERNAL TOXICITY	BARNES DISTRIBUTION				
		FERTILITY	DEVELOPMENT TOXIN	SPECIES	DOSE	EXPOSURE
LEAD		EQUIVOCAL		RAT - FEMAL	ORAL: 520 MG/KG	24 HOURS PER DAY
		EQUIVOCAL		RAT - FEMALE	INHALATION: 3 MG/M3	
	EQUIVOCAL			MOUSE - FEMALE	ORAL: 300 MG/KG	
		EQUIVOCAL		MOUSE	ORAL: 4099.2 MG/KG	

ALPHA HAS NOT CONDUCTED SPECIFIC STUDIES ON THE TOXICITY OF THIS PRODUCT.

-----12. ECOLOGICAL INFORMATION -----

-----13. DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL:

THE GENERATION OF WASTE SHOULD BE AVOIDED OR MINIMIZED WHEREVER POSSIBLE. EMPTY CONTAINERS OR LINERS MAY RETAIN SOME PRODUCT RESIDUES. THIS MATERIAL AND ITS CONTAINER MUST BE DISPOSED OF IN A SAFE WAY. DISPOSE OF SURPLUS AND NON-RECYCLABLE PRODUCTS VIA A LICENSED WASTE DISPOSAL CONTRACTOR. DISPOSAL OF THIS PRODUCT, SOLUTIONS AND ANY BY-PRODUCTS SHOULD AT ALL TIMES COMPLY WITH THE REQUIREMENTS OF ENVIRONMENTAL PROTECTION AND WASTE DISPOSAL LEGISLATION AND ANY REGIONAL LOCAL AUTHORITY REQUIREMENTS. AVOID DISPERSAL OF SPILLED MATERIAL AND RUNOFF AND CONTACT WITH SOIL, WATERWAYS, DRAINS AND SEWERS.

DISPOSAL SHOULD BE IN ACCORDANCE WITH APPLICABLE REGIONAL, NATIONAL AND LOCAL LAWS AND REGULATIONS.

REFER TO SECTION 7: HANDLING AND STORAGE AND SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION FOR ADDITIONAL HANDLING INFORMATION AND PROTECTION OF EMPLOYEES.

-----14. TRANSPORT INFORMATION -----

REGULATORY INFORMATION	UN NUMBER	PROPER SHIPPING NAME	CLASSES	PG* LABEL	ADDITIONAL INFORMATION
DOT CLASSIFICATION	NOT REGULATED				

PG*: PACKING GROUP

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-----15. REGULATORY INFORMATION -----

UNITED STATES:

HCS CLASSIFICATION:

| TOXIC MATERIAL
IRRITATING MATERIAL
SENSITIZING MATERIAL
CARCINOGEN
TARGET ORGAN EFFECTS

U.S. FEDERAL REGULATIONS:

TSCA 5(A)2 PROPOSED SIGNIFICANT NEW USE RULES: NO PRODUCTS WERE FOUND.

TSCA 5(A)2 FINAL SIGNIFICANT NEW USE RULES: NO PRODUCTS WERE FOUND.

| TSCA 12(B) ONE-TIME EXPORT: LEAD

| TSCA 12(B) ANNUAL EXPORT NOTIFICATION: LEAD

| REFER TO PROPOSED RULE (59 FEDERAL REGISTER 11122, MARCH 9, 1994) FOR
| DETAILS ON TSCA 12(B) APPLICABILITY FOR LEAD.

UNITED STATES INVENTORY (TSCA 8B): ALL COMPONENTS ARE LISTED OR EXEMPTED.

SARA 313:

PRODUCT NAME	CAS NUMBER	CONCENTRATION
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FORM R - REPORTING REQUIREMENTS:

LEAD	7439-92-1	40-50
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SUPPLIER NOTIFICATION:

LEAD	7439-92-1	40-50
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CALIFORNIA PROP. 65:

WARNING:

THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE
CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

CANADA:

WHMIS (CANADA):

CLASS D-2A: MATERIAL CAUSING OTHER TOXIC EFFECTS (VERY TOXIC).

CANADA INVENTORY: ALL COMPONENTS ARE LISTED OR EXEMPTED.

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INTERNATIONAL LISTS:

CHINA INVENTORY (IECSC): ALL COMPONENTS ARE LISTED OR EXEMPTED.
EUROPE INVENTORY: ALL COMPONENTS ARE LISTED OR EXEMPTED.
AUSTRALIA INVENTORY (AICS): ALL COMPONENTS ARE LISTED OR EXEMPTED.
JAPAN INVENTORY (ENCS): ALL COMPONENTS ARE LISTED OR EXEMPTED.
KOREA INVENTORY (KECI): ALL COMPONENTS ARE LISTED OR EXEMPTED.
PHILIPPINES INVENTORY(PICCS): ALL COMPONENTS ARE LISTED OR EXEMPTED.

-----16. OTHER INFORMATION -----

DEFINITION OF TERMS:

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
CEILING: MAXIMUM EXPOSURE LIMIT DEFINED BY OSHA
CAS: CHEMICAL ABSTRACT SERVICE
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
NIOSH: NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH
NTP: NATIONAL TOXICOLOGY PROGRAM
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL: PERMISSIBLE EXPOSURE LIMIT
REL: RECOMMENDED EXPOSURE LIMIT
RTK: RIGHT TO KNOW
SARA: SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT
STEL: SHORT TERM EXPOSURE LIMIT
TLV: ACGIH THRESHOLD LIMIT VALUE
TLV-C: ACGIH THRESHOLD LIMIT VALUE, CEILING
TRADE SECRET: CLAIMED AS ALLOWED UNDER 29 CFR SUBSECTION 1910.1200
TSCA: TOXIC SUBSTANCES CONTROL ACT
PPE: PERSONAL PROTECTION EQUIPMENT
CEPA: CANADIAN ENVIRONMENTAL PROTECTION ACT
DSL: DOMESTIC SUBSTANCE LIST
NDSL: NON-DOMESTIC SUBSTANCE LIST
NSN: NEW SUBSTANCE NOTIFICATION RULES

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4.1B1161

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COOKSON ELECTRONICS

ALPHA IS A SUBSIDIARY OF COOKSON GROUP PL

ORDER NO: 4640004 RELEASE NO: 001 MSDS NO: 015188

BARNES DISTRIBUTION

ORDER NO: 5204759 RELEASE NO: 001 MSDS NO: 017970

BARNES DISTRIBUTION

Synonyms: KP87594 KP87595 KP87596 KP87597 KP87598 KP87599 KP87600 KP87601 KP87602
KP87603 KP87604 KP87605 KP87606

3M

MATERIAL SAFETY DATA SHEET

3M(TM) ABRASIVE PRODUCTS, 361F WITH ROLOC(TM) ATTACHMENT SYSTEM

05/31/11

MATERIAL SAFETY DATA SHEET

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WITH THE INTENTION OF EARNING A PROFIT THEREON.

-----SECTION 1: PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME:

3M(TM) ABRASIVE PRODUCTS, 361F WITH ROLOC(TM) ATTACHMENT SYSTEM

MANUFACTURER: 3M

DIVISION: ABRASIVES SYSTEMS DIVISION

ADDRESS:

3M CENTER
ST. PAUL, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 OR (651) 737-6501 (24 HOURS)

ISSUE DATE: 05/31/11

SUPERCEDES DATE: 09/21/10

DOCUMENT GROUP: 26-3522-5

PRODUCT USE:

INTENDED USE: ABRASIVE PRODUCT

-----SECTION 2: INGREDIENTS -----

INGREDIENT	C.A.S. NO.	% BY WT
ALUMINUM OXIDE MINERAL	1344-28-1	25 - 50

B A R N E S D I S T R I B U T I O N

FILLER	1317-65-3	10 - 25
ADDITIVE	13463-67-7	0.3 - 2
QUARTZ SILICA	14808-60-7	0.01 - 0.25
CURED RESIN	MIXTURE	10 - 35
POLYESTER CLOTH BACKING	NONE	5 - 20
ROLOC(TM) ATTACHMENT	MIXTURE	2 - 5

-----SECTION 3: HAZARDS IDENTIFICATION -----

3.1 EMERGENCY OVERVIEW:

ODOR, COLOR, GRADE: SOLID ABRASIVE PRODUCT

GENERAL PHYSICAL FORM: SOLID

IMMEDIATE HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS:
THIS DOCUMENT COVERS ONLY THE 3M PRODUCT. FOR COMPLETE ASSESSMENT, WHEN DETERMINING THE DEGREE OF HAZARD, THE MATERIAL BEING ABRADED MUST ALSO BE CONSIDERED.

3.2 POTENTIAL HEALTH EFFECTS:

EYE CONTACT:

MECHANICAL EYE IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE PAIN, REDNESS, TEARING AND CORNEAL ABRASION. DUST CREATED BY GRINDING, SANDING, OR MACHINING MAY CAUSE EYE IRRITATION. SIGNS/SYMPTOMS MAY INCLUDE REDNESS, SWELLING, PAIN, TEARING, AND BLURRED OR HAZY VISION.

SKIN CONTACT:

MECHANICAL SKIN IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE ABRASION, REDNESS, PAIN, AND ITCHING.

INHALATION:

DUST FROM GRINDING, SANDING OR MACHINING MAY CAUSE IRRITATION OF THE RESPIRATORY SYSTEM. SIGNS/SYMPTOMS MAY INCLUDE COUGH, SNEEZING, NASAL DISCHARGE, HEADACHE, HOARSENESS, AND NOSE AND THROAT PAIN.

PROLONGED OR REPEATED EXPOSURE MAY CAUSE:

PNEUMOCONIOSIS:
SIGN/SYMPTOMS MAY INCLUDE PERSISTENT COUGH, BREATHLESSNESS, CHEST PAIN, INCREASED AMOUNTS OF SPUTUM, AND CHANGES IN LUNG FUNCTION TESTS.

BARNES DISTRIBUTION

INGESTION: NO HEALTH EFFECTS ARE EXPECTED.

THIS PRODUCT CONTAINS QUARTZ SILICA. CANCER OF THE LUNGS AND SILICOSIS HAVE BEEN ASSOCIATED WITH QUARTZ (CRYSTALLINE) SILICA. NO EXPOSURE TO QUARTZ (CRYSTALLINE) SILICA IS ANTICIPATED DURING NORMAL INTENDED USE OF 3M COATED AND SURFACE CONDITIONING ABRASIVES. NO DETECTABLE RESPIRABLE QUARTZ AND OTHER FORMS OF CRYSTALLINE SILICA WERE FOUND WHEN A SIMULATED GRINDING AIR SAMPLING STUDY WAS CONDUCTED ON ANALOGOUS 3M COATED ABRASIVE AND SURFACE CONDITIONING CONSTRUCTIONS THAT CONTAINED SIMILAR TO OR GREATER CONCENTRATIONS OF CRYSTALLINE SILICA. THEREFORE, THE HEALTH EFFECTS ASSOCIATED WITH CRYSTALLINE SILICA (E.G. QUARTZ) ARE NOT EXPECTED DURING THE INTENDED USE OF THIS PRODUCT.

INGREDIENT	C.A.S. NO.	CLASS DESCRIPTION	REGULATION
QUARTZ SILICA	14808-60-7	GRP. 1: CARCINOGENIC TO HUMANS	INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
QUARTZ SILICA	14808-60-7	KNOWN HUMAN CARCINOGEN	NATIONAL TOXICOLOGY PROGRAM CARCINOGENS

-----SECTION 4: FIRST AID MEASURES -----

4.1 FIRST AID PROCEDURES:

THE FOLLOWING FIRST AID RECOMMENDATIONS ARE BASED ON AN ASSUMPTION THAT APPROPRIATE PERSONAL AND INDUSTRIAL HYGIENE PRACTICES ARE FOLLOWED.

EYE CONTACT:

FLUSH EYES WITH LARGE AMOUNTS OF WATER. IF SIGNS/SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

SKIN CONTACT:

WASH AFFECTED AREA WITH SOAP AND WATER. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

INHALATION:

REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

IF SWALLOWED: NO NEED FOR FIRST AID IS ANTICIPATED.

-----SECTION 5: FIRE FIGHTING MEASURES -----

5.1 FLAMMABLE PROPERTIES:

AUTOIGNITION TEMPERATURE: NO DATA AVAILABLE
FLASH POINT: NOT APPLICABLE
FLAMMABLE LIMITS(LEL): NOT APPLICABLE
FLAMMABLE LIMITS(UEL): NOT APPLICABLE

5.2 EXTINGUISHING MEDIA:

BARNES DISTRIBUTION
ORDINARY COMBUSTIBLE MATERIAL. USE FIRE EXTINGUISHERS WITH CLASS A
EXTINGUISHING AGENTS (E.G., WATER, FOAM).

5.3 PROTECTION OF FIRE FIGHTERS:

SPECIAL FIRE FIGHTING PROCEDURES:

WEAR FULL PROTECTIVE EQUIPMENT (BUNKER GEAR) AND A SELF-CONTAINED
BREATHING APPARATUS (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NOT APPLICABLE. NONE INHERENT IN THIS PRODUCT.

NOTE:

SEE STABILITY AND REACTIVITY (SECTION 10) FOR HAZARDOUS COMBUSTION AND
THERMAL DECOMPOSITION INFORMATION.

-----SECTION 6: ACCIDENTAL RELEASE MEASURES -----

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
NOT APPLICABLE.

6.2. ENVIRONMENTAL PRECAUTIONS: NOT APPLICABLE.

CLEAN-UP METHODS: NOT APPLICABLE.

IN THE EVENT OF A RELEASE OF THIS MATERIAL, THE USER SHOULD DETERMINE IF
THE RELEASE QUALIFIES AS REPORTABLE ACCORDING TO LOCAL, STATE, AND FEDERAL
REGULATIONS.

-----SECTION 7: HANDLING AND STORAGE -----

7.1 HANDLING:

FOR INDUSTRIAL OR PROFESSIONAL USE ONLY. AVOID BREATHING OF DUST CREATED
BY SANDING, GRINDING OR MACHINING. AVOID EYE CONTACT WITH DUST OR AIRBORNE
PARTICLES. DAMAGED PRODUCT CAN BREAK APART DURING USE AND CAUSE SERIOUS
INJURY TO FACE OR EYES. CHECK PRODUCT FOR DAMAGE SUCH AS CRACKS OR NICKS
PRIOR TO USE. REPLACE IF DAMAGED. ALWAYS WEAR EYE AND FACE PROTECTION WHEN
WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS.
SPARKS AND PARTICLES FLYING FROM THE PRODUCT DURING SANDING OR GRINDING
CAN CAUSE INJURY AND FIRE.

7.2 STORAGE: STORE IN A COOL, DRY PLACE.

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

8.1 ENGINEERING CONTROLS:

PROVIDE VENTILATION ADEQUATE TO CONTROL DUST CONCENTRATIONS BELOW
RECOMMENDED EXPOSURE LIMITS AND/OR CONTROL DUST. PROVIDE APPROPRIATE
LOCAL EXHAUST VENTILATION FOR SANDING, GRINDING OR MACHINING. USE GENERAL
DILUTION VENTILATION AND/OR LOCAL EXHAUST VENTILATION TO CONTROL AIRBORNE

BARNES DISTRIBUTION

EXPOSURES TO BELOW OCCUPATIONAL EXPOSURE LIMITS AND/OR CONTROL DUST, FUME, OR AIRBORNE PARTICLES. IF VENTILATION IS NOT ADEQUATE, USE RESPIRATORY PROTECTION EQUIPMENT.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE):

8.2.1 EYE/FACE PROTECTION:

AVOID EYE CONTACT. TO MINIMIZE THE RISK OF INJURY TO FACE AND EYES, ALWAYS WEAR EYE AND FACE PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS.

THE FOLLOWING EYE PROTECTION(S) ARE RECOMMENDED:
SAFETY GLASSES WITH SIDE SHIELDS.

8.2.2 SKIN PROTECTION:

AVOID SKIN CONTACT. WEAR APPROPRIATE GLOVES TO MINIMIZE RISK OF INJURY TO SKIN FROM CONTACT WITH DUST OR PHYSICAL ABRASION FROM GRINDING OR SANDING.

8.2.3 RESPIRATORY PROTECTION:

AVOID BREATHING OF DUST CREATED BY CUTTING, SANDING, GRINDING OR MACHINING. ASSESS EXPOSURE CONCENTRATIONS OF ALL MATERIALS INVOLVED IN THE WORK PROCESS. CONSIDER MATERIAL BEING ABRADED WHEN DETERMINING THE APPROPRIATE RESPIRATORY PROTECTION. SELECT AND USE APPROPRIATE RESPIRATORS TO PREVENT INHALATION OVEREXPOSURE.

SELECT ONE OF THE FOLLOWING NIOSH APPROVED RESPIRATORS BASED ON AIRBORNE CONCENTRATION OF CONTAMINANTS AND IN ACCORDANCE WITH OSHA REGULATIONS: HALF FACEPIECE OR FULLFACE AIR-PURIFYING RESPIRATOR WITH N95 PARTICULATE FILTERS. SELECT AND USE RESPIRATORY PROTECTION TO PREVENT AN INHALATION EXPOSURE BASED ON THE RESULTS OF AN EXPOSURE ASSESSMENT. CONSULT WITH YOUR RESPIRATOR MANUFACTURER FOR SELECTION OF APPROPRIATE TYPES OF RESPIRATORS.

8.2.4 PREVENTION OF SWALLOWING:

NOT AN EXPECTED ROUTE OF EXPOSURE. WASH HANDS AFTER HANDLING AND BEFORE EATING.

8.3 EXPOSURE GUIDELINES:

INGREDIENT	AUTHORITY	TYPE	LIMIT	ADDITIONAL INFORMATION
ALUMINUM OXIDE MINERAL	CMRG	TWA	1 FIBER/CC	
ALUMINUM OXIDE MINERAL	OSHA	TWA, RESPIRABLE FRACTION	5 MG/M3	
ALUMINUM OXIDE MINERAL	OSHA	TWA, AS TOTAL DUST	15 MG/M3	
FILLER	OSHA	TWA, RESPIRABLE FRACTION	5 MG/M3	

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BARNES DISTRIBUTION

FILLER	OSHA	TWA, AS TOTAL DUST	15 MG/M3
QUARTZ SILICA	ACGIH	TWA, RESPIRABLE FRACTION	0.025 MG/M3
QUARTZ SILICA	OSHA	TWA CONCENTRATION, RESPIRABLE	0.1 MG/M3
QUARTZ SILICA	OSHA	TWA CONCENTRATION, AS TOTAL DUST	0.3 MG/M3
ADDITIVE	ACGIH	TWA	10 MG/M3
ADDITIVE	CMRG	TWA, AS RESPIRABLE DUST	5 MG/M3
ADDITIVE	OSHA	TWA, AS TOTAL DUST	15 MG/M3

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

CMRG: CHEMICAL MANUFACTURER RECOMMENDED GUIDELINE

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

AIHA:
AMERICAN INDUSTRIAL HYGIENE ASSOCIATION WORKPLACE ENVIRONMENTAL EXPOSURE LEVEL (WEEL)

-----SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES -----

ODOR, COLOR, GRADE: SOLID ABRASIVE PRODUCT

GENERAL PHYSICAL FORM: SOLID

AUTOIGNITION TEMPERATURE: NO DATA AVAILABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS(LEL): NOT APPLICABLE
FLAMMABLE LIMITS(UEL): NOT APPLICABLE

BOILING POINT: NOT APPLICABLE

DENSITY: NO DATA AVAILABLE

SPECIFIC GRAVITY: NO DATA AVAILABLE

pH: NOT APPLICABLE

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BARNES DISTRIBUTION

MELTING POINT: NO DATA AVAILABLE

SOLUBILITY IN WATER: NIL

EVAPORATION RATE: NOT APPLICABLE

KOW - OCT/WATER PARTITION COEF: NOT APPLICABLE

VISCOSITY: NOT APPLICABLE

-----SECTION 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE.

MATERIALS AND CONDITIONS TO AVOID:

10.1 CONDITIONS TO AVOID: NONE KNOWN

10.2 MATERIALS TO AVOID: NONE KNOWN

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

SUBSTANCE	CONDITION
CARBON MONOXIDE	DURING COMBUSTION
CARBON DIOXIDE	DURING COMBUSTION

-----SECTION 11: TOXICOLOGICAL INFORMATION -----

PLEASE CONTACT THE ADDRESS LISTED IN SECTION 1 OF THIS MSDS FOR TOXICOLOGICAL INFORMATION ON THIS MATERIAL AND/OR ITS COMPONENTS.

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOTOXICOLOGICAL INFORMATION: NOT DETERMINED.

CHEMICAL FATE INFORMATION: NOT DETERMINED.

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:

THE SUBSTRATE THAT WAS ABRADED MUST BE CONSIDERED AS A FACTOR IN THE DISPOSAL METHOD FOR THIS PRODUCT. DISPOSE OF WASTE PRODUCT IN A SANITARY LANDFILL. AS A DISPOSAL ALTERNATIVE, INCINERATE IN AN INDUSTRIAL OR COMMERCIAL FACILITY IN THE PRESENCE OF A COMBUSTIBLE MATERIAL.

EPA HAZARDOUS WASTE NUMBER (RCRA): NOT REGULATED

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BARNES DISTRIBUTION
SINCE REGULATIONS VARY, CONSULT APPLICABLE REGULATIONS OR AUTHORITIES
BEFORE DISPOSAL.

-----SECTION 14: TRANSPORT INFORMATION -----

NOT REGULATED PER U.S. DOT, IATA OR IMO.

THESE TRANSPORTATION CLASSIFICATIONS ARE PROVIDED AS A CUSTOMER SERVICE.
AS THE SHIPPER YOU REMAIN RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE
LAWS AND REGULATIONS, INCLUDING PROPER TRANSPORTATION CLASSIFICATION AND
PACKAGING. 3M TRANSPORTATION CLASSIFICATIONS ARE BASED ON PRODUCT
FORMULATION, PACKAGING, 3M POLICIES AND 3M UNDERSTANDING OF APPLICABLE
CURRENT REGULATIONS. 3M DOES NOT GUARANTEE THE ACCURACY OF THIS
CLASSIFICATION INFORMATION. THIS INFORMATION APPLIES ONLY TO
TRANSPORTATION CLASSIFICATION AND NOT THE PACKAGING, LABELING, OR MARKING
REQUIREMENTS. THE ORIGINAL 3M PACKAGE IS CERTIFIED FOR U.S. GROUND
SHIPMENT ONLY. IF YOU ARE SHIPPING BY AIR OR OCEAN, THE PACKAGE MAY NOT
MEET APPLICABLE REGULATORY REQUIREMENTS.

-----SECTION 15: REGULATORY INFORMATION -----

US FEDERAL REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

311/312 HAZARD CATEGORIES:

FIRE HAZARD - NO
PRESSURE HAZARD - NO
REACTIVITY HAZARD - NO
IMMEDIATE HAZARD - YES
DELAYED HAZARD - YES

STATE REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

CHEMICAL INVENTORIES:

THIS PRODUCT IS AN ARTICLE AS DEFINED BY TSCA REGULATIONS, AND IS EXEMPT
FROM TSCA INVENTORY LISTING REQUIREMENTS.

CONTACT 3M FOR MORE INFORMATION.

INTERNATIONAL REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

THIS MSDS HAS BEEN PREPARED TO MEET THE U.S. OSHA HAZARD COMMUNICATION
STANDARD, 29 CFR 1910.1200.

-----SECTION 16: OTHER INFORMATION -----

NFPA HAZARD CLASSIFICATION:

HEALTH 1
FLAMMABILITY 1
REACTIVITY 0
SPECIAL HAZARDS NONE

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B A R N E S D I S T R I B U T I O N

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS ARE DESIGNED FOR USE BY EMERGENCY RESPONSE PERSONNEL TO ADDRESS THE HAZARDS THAT ARE PRESENTED BY SHORT-TERM, ACUTE EXPOSURE TO A MATERIAL UNDER CONDITIONS OF FIRE, SPILL, OR SIMILAR EMERGENCIES. HAZARD RATINGS ARE PRIMARILY BASED ON THE INHERENT PHYSICAL AND TOXIC PROPERTIES OF THE MATERIAL BUT ALSO INCLUDE THE TOXIC PROPERTIES OF COMBUSTION OR DECOMPOSITION PRODUCTS THAT ARE KNOWN TO BE GENERATED IN SIGNIFICANT QUANTITIES.

REVISION CHANGES: NOT APPLICABLE

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BARNES DISTRIBUTION

Synonyms: 07451 07456 07457 07481 07483 07486
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3M(TM) SCOTCH-BRITE(TM) SURFACE CONDITIONING PRODUCTS, AMED (SHEETS, (HOOKIT(TM)), ROLLS, DISCS (INCLUDES ROLOC(TM), TN, TP, TR, TS, TSM), BELTS, SCRIM BELTS)

07/18/11

3M

MATERIAL SAFETY DATA SHEET

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-----SECTION 1: PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME:

3M(TM) SCOTCH-BRITE(TM) SURFACE CONDITIONING PRODUCTS, AMED (SHEETS, (HOOKIT(TM)), ROLLS, DISCS (INCLUDES ROLOC(TM), TN, TP, TR, TS, TSM), BELTS, SCRIM BELTS)

MANUFACTURER: 3M

DIVISION: ABRASIVES SYSTEMS DIVISION

ADDRESS:

3M CENTER
ST. PAUL, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 OR (651) 737-6501 (24 HOURS)

ISSUE DATE: 07/18/11

SUPERCEDES DATE: 05/23/11

DOCUMENT GROUP: 23-7148-2

PRODUCT USE:

INTENDED USE: ABRASIVE PRODUCT

-----SECTION 2: INGREDIENTS -----

INGREDIENT	BARNES	DISTRIBUTION
	C.A.S. NO.	% BY WT
ALUMINUM OXIDE MINERAL	1344-28-1	25 - 40
FILLER	1317-65-3	3 - 6
ADDITIVE	13463-67-7	<2
NYLON BACKING	MIXTURE	10 - 20
NYLON SCRIM	NONE	5 - 10
CURED RESIN	MIXTURE	20 - 35
ROLOC(TM) ATTACHMENT	NONE	0 - 5
HOOKIT(TM) ATTACHMENT	MIXTURE	0 - 5

-----SECTION 3: HAZARDS IDENTIFICATION -----

3.1 EMERGENCY OVERVIEW:

SPECIFIC PHYSICAL FORM: NON-WOVEN MATERIAL

ODOR, COLOR, GRADE: NON WOVEN ABRASIVE

GENERAL PHYSICAL FORM: SOLID

IMMEDIATE HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS:
THIS DOCUMENT COVERS ONLY THE 3M PRODUCT. FOR COMPLETE ASSESSMENT, WHEN DETERMINING THE DEGREE OF HAZARD, THE MATERIAL BEING ABRADED MUST ALSO BE CONSIDERED.

3.2 POTENTIAL HEALTH EFFECTS:

EYE CONTACT:

MECHANICAL EYE IRRITATION:

SIGNS/SYMPTOMS MAY INCLUDE PAIN, REDNESS, TEARING AND CORNEAL ABRASION. DUST CREATED BY GRINDING, SANDING, OR MACHINING MAY CAUSE EYE IRRITATION. SIGNS/SYMPTOMS MAY INCLUDE REDNESS, SWELLING, PAIN, TEARING, AND BLURRED OR HAZY VISION.

SKIN CONTACT:

MECHANICAL SKIN IRRITATION:

SIGNS/SYMPTOMS MAY INCLUDE ABRASION, REDNESS, PAIN, AND ITCHING.

INHALATION:

DUST FROM GRINDING, SANDING OR MACHINING MAY CAUSE IRRITATION OF THE RESPIRATORY SYSTEM. SIGNS/SYMPTOMS MAY INCLUDE COUGH, SNEEZING, NASAL DISCHARGE, HEADACHE, HOARSENESS, AND NOSE AND THROAT PAIN.

PROLONGED OR REPEATED EXPOSURE MAY CAUSE:

BARNES DISTRIBUTION

PNEUMOCONIOSIS:

SIGN/SYMPTOMS MAY INCLUDE PERSISTENT COUGH, BREATHLESSNESS, CHEST PAIN, INCREASED AMOUNTS OF SPUTUM, AND CHANGES IN LUNG FUNCTION TESTS.

INGESTION: NO HEALTH EFFECTS ARE EXPECTED.

-----SECTION 4: FIRST AID MEASURES -----

4.1 FIRST AID PROCEDURES:

THE FOLLOWING FIRST AID RECOMMENDATIONS ARE BASED ON AN ASSUMPTION THAT APPROPRIATE PERSONAL AND INDUSTRIAL HYGIENE PRACTICES ARE FOLLOWED.

EYE CONTACT:

FLUSH EYES WITH LARGE AMOUNTS OF WATER. IF SIGNS/SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

SKIN CONTACT:

WASH AFFECTED AREA WITH SOAP AND WATER. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

INHALATION:

REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

IF SWALLOWED: NO NEED FOR FIRST AID IS ANTICIPATED.

-----SECTION 5: FIRE FIGHTING MEASURES -----

5.1 FLAMMABLE PROPERTIES:

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS (LEL): NOT APPLICABLE

FLAMMABLE LIMITS (UEL): NOT APPLICABLE

5.2 EXTINGUISHING MEDIA:

MATERIAL WILL NOT BURN. ORDINARY COMBUSTIBLE MATERIAL. USE FIRE EXTINGUISHERS WITH CLASS A EXTINGUISHING AGENTS (E.G., WATER, FOAM).

5.3 PROTECTION OF FIRE FIGHTERS:

SPECIAL FIRE FIGHTING PROCEDURES:

WEAR FULL PROTECTIVE EQUIPMENT (BUNKER GEAR) AND A SELF-CONTAINED BREATHING APPARATUS (SCBA).

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NOT APPLICABLE. NONE INHERENT IN THIS PRODUCT.

NOTE:

SEE STABILITY AND REACTIVITY (SECTION 10) FOR HAZARDOUS COMBUSTION AND

BARNES DISTRIBUTION
THERMAL DECOMPOSITION INFORMATION.

-----SECTION 6: ACCIDENTAL RELEASE MEASURES -----

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
NOT APPLICABLE.

6.2. ENVIRONMENTAL PRECAUTIONS:
NOT APPLICABLE. PLACE IN A CONTAINER APPROVED FOR TRANSPORTATION BY
APPROPRIATE AUTHORITIES, BUT DO NOT SEAL THE CONTAINER FOR 48 HOURS
TO AVOID PRESSURE BUILD-UP.

CLEAN-UP METHODS: NOT APPLICABLE.

IN THE EVENT OF A RELEASE OF THIS MATERIAL, THE USER SHOULD DETERMINE IF
THE RELEASE QUALIFIES AS REPORTABLE ACCORDING TO LOCAL, STATE, AND FEDERAL
REGULATIONS.

-----SECTION 7: HANDLING AND STORAGE -----

7.1 HANDLING:
FOR INDUSTRIAL OR PROFESSIONAL USE ONLY. AVOID EYE CONTACT WITH DUST OR
AIRBORNE PARTICLES. AVOID BREATHING OF DUST CREATED BY SANDING, GRINDING OR
MACHINING. DAMAGED PRODUCT CAN BREAK APART DURING USE AND CAUSE SERIOUS
INJURY TO FACE OR EYES. CHECK PRODUCT FOR DAMAGE SUCH AS CRACKS OR NICKS
PRIOR TO USE. REPLACE IF DAMAGED. ALWAYS WEAR EYE AND FACE PROTECTION WHEN
WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS.
SPARKS AND PARTICLES FLYING FROM THE PRODUCT DURING SANDING OR GRINDING CAN
CAUSE INJURY AND FIRE.

7.2 STORAGE: STORE IN A COOL, DRY PLACE.

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

8.1 ENGINEERING CONTROLS:
USE WITH APPROPRIATE LOCAL EXHAUST VENTILATION. PROVIDE VENTILATION ADEQUATE
TO CONTROL DUST CONCENTRATIONS BELOW RECOMMENDED EXPOSURE LIMITS AND/OR
CONTROL DUST. USE GENERAL DILUTION VENTILATION AND/OR LOCAL EXHAUST
VENTILATION TO CONTROL AIRBORNE EXPOSURES TO BELOW OCCUPATIONAL EXPOSURE
LIMITS AND/OR CONTROL DUST, FUME, OR AIRBORNE PARTICLES. IF VENTILATION IS
NOT ADEQUATE, USE RESPIRATORY PROTECTION EQUIPMENT. PROVIDE APPROPRIATE
LOCAL EXHAUST VENTILATION FOR SANDING, GRINDING OR MACHINING.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE):

8.2.1 EYE/FACE PROTECTION:
AVOID EYE CONTACT. TO MINIMIZE THE RISK OF INJURY TO FACE AND EYES, ALWAYS
WEAR EYE AND FACE PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS
OR WHEN NEAR SUCH OPERATIONS.

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THE FOLLOWING EYE PROTECTION(S) ARE RECOMMENDED:
SAFETY GLASSES WITH SIDE SHIELDS.

8.2.2 SKIN PROTECTION:

AVOID SKIN CONTACT. SELECT AND USE GLOVES AND/OR PROTECTIVE CLOTHING TO PREVENT SKIN CONTACT BASED ON THE RESULTS OF AN EXPOSURE ASSESSMENT. CONSULT WITH YOUR GLOVE AND/OR PROTECTIVE CLOTHING MANUFACTURER FOR SELECTION OF APPROPRIATE COMPATIBLE MATERIALS. WEAR APPROPRIATE GLOVES TO MINIMIZE RISK OF INJURY TO SKIN FROM CONTACT WITH DUST OR PHYSICAL ABRASION FROM GRINDING OR SANDING.

8.2.3 RESPIRATORY PROTECTION:

AVOID BREATHING OF DUST CREATED BY SANDING, GRINDING OR MACHINING. ASSESS EXPOSURE CONCENTRATIONS OF ALL MATERIALS INVOLVED IN THE WORK PROCESS. CONSIDER MATERIAL BEING ABRADED WHEN DETERMINING THE APPROPRIATE RESPIRATORY PROTECTION. SELECT AND USE APPROPRIATE RESPIRATORS TO PREVENT INHALATION OVEREXPOSURE.

SELECT ONE OF THE FOLLOWING NIOSH APPROVED RESPIRATORS BASED ON AIRBORNE CONCENTRATION OF CONTAMINANTS AND IN ACCORDANCE WITH OSHA REGULATIONS: HALF FACEPIECE OR FULLFACE AIR-PURIFYING RESPIRATOR WITH N95 PARTICULATE FILTERS. SELECT AND USE RESPIRATORY PROTECTION TO PREVENT AN INHALATION EXPOSURE BASED ON THE RESULTS OF AN EXPOSURE ASSESSMENT. CONSULT WITH YOUR RESPIRATOR MANUFACTURER FOR SELECTION OF APPROPRIATE TYPES OF RESPIRATORS.

8.2.4 PREVENTION OF SWALLOWING:

NOT AN EXPECTED ROUTE OF EXPOSURE. WASH HANDS AFTER HANDLING AND BEFORE EATING.

8.3 EXPOSURE GUIDELINES:

INGREDIENT	AUTHORITY	TYPE	LIMIT	ADDITIONAL INFORMATION
ALUMINUM OXIDE MINERAL	CMRG	TWA	1 FIBER/CC	
ALUMINUM OXIDE MINERAL	OSHA	TWA, RESPIRABLE FRACTION	5 MG/M3	
ALUMINUM OXIDE MINERAL	OSHA	TWA, AS TOTAL DUST	15 MG/M3	
FILLER	OSHA	TWA, RESPIRABLE FRACTION	5 MG/M3	
FILLER	OSHA	TWA, AS TOTAL DUST	15 MG/M3	
PETROLEUM DISTILLATES	OSHA	TWA	2000 MG/M3	
THALLIUM COMPOUNDS	ACGIH	TWA, AS T1, INHALABLE FRACTION	0.02 MG/M3	SKIN NOTATION*

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ADDITIVE	ACGIH	TWA	10 MG/M3
ADDITIVE	CMRG	TWA, AS RESPIRABLE DUST	5 MG/M3
ADDITIVE	OSHA	TWA, AS TOTAL DUST	15 MG/M3

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

CMRG: CHEMICAL MANUFACTURER RECOMMENDED GUIDELINE

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

AIHA:

AMERICAN INDUSTRIAL HYGIENE ASSOCIATION WORKPLACE ENVIRONMENTAL EXPOSURE LEVEL (WEEL)

-----SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES -----

SPECIFIC PHYSICAL FORM: NON-WOVEN MATERIAL

ODOR, COLOR, GRADE: NON WOVEN ABRASIVE

GENERAL PHYSICAL FORM: SOLID

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS (LEL): NOT APPLICABLE

FLAMMABLE LIMITS (UEL): NOT APPLICABLE

BOILING POINT: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

SPECIFIC GRAVITY: NOT APPLICABLE

pH: NOT APPLICABLE

MELTING POINT: NOT APPLICABLE

SOLUBILITY IN WATER: NOT APPLICABLE

EVAPORATION RATE: NOT APPLICABLE

KOW - OCT/WATER PARTITION COEF: NOT APPLICABLE

VISCOSITY: NOT APPLICABLE

-----SECTION 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE.

MATERIALS AND CONDITIONS TO AVOID:

10.1 CONDITIONS TO AVOID: NONE KNOWN

10.2 MATERIALS TO AVOID: NONE KNOWN

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

SUBSTANCE	CONDITION
AMINE COMPOUNDS	DURING COMBUSTION
CARBON MONOXIDE	DURING COMBUSTION
CARBON DIOXIDE	DURING COMBUSTION
HYDROGEN CYANIDE	DURING COMBUSTION
AMMONIA	DURING COMBUSTION
OXIDES OF NITROGEN	DURING COMBUSTION

HAZARDOUS DECOMPOSITION:

UNDER RECOMMENDED USAGE CONDITIONS, HAZARDOUS DECOMPOSITION PRODUCTS ARE NOT EXPECTED. HAZARDOUS DECOMPOSITION PRODUCTS MAY OCCUR AS A RESULT OF OXIDATION, HEATING, OR REACTION WITH ANOTHER MATERIAL.

-----SECTION 11: TOXICOLOGICAL INFORMATION -----

PLEASE CONTACT THE ADDRESS LISTED IN SECTION 1 OF THIS MSDS FOR TOXICOLOGICAL INFORMATION ON THIS MATERIAL AND/OR ITS COMPONENTS.

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOTOXICOLOGICAL INFORMATION: NOT DETERMINED.

CHEMICAL FATE INFORMATION: NOT DETERMINED.

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:

THE SUBSTRATE THAT WAS ABRADED MUST BE CONSIDERED AS A FACTOR IN THE DISPOSAL METHOD FOR THIS PRODUCT. DISPOSE OF WASTE PRODUCT IN A SANITARY LANDFILL. AS

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A DISPOSAL ALTERNATIVE, INCINERATE IN AN INDUSTRIAL OR COMMERCIAL FACILITY IN THE PRESENCE OF A COMBUSTIBLE MATERIAL. COMBUSTION PRODUCTS WILL INCLUDE HF. FACILITY MUST BE CAPABLE OF HANDLING HALOGENATED MATERIALS.

EPA HAZARDOUS WASTE NUMBER (RCRA): NOT REGULATED

SINCE REGULATIONS VARY, CONSULT APPLICABLE REGULATIONS OR AUTHORITIES BEFORE DISPOSAL.

-----SECTION 14: TRANSPORT INFORMATION -----

NOT REGULATED PER U.S. DOT, IATA OR IMO.

THESE TRANSPORTATION CLASSIFICATIONS ARE PROVIDED AS A CUSTOMER SERVICE. AS THE SHIPPER YOU REMAIN RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS, INCLUDING PROPER TRANSPORTATION CLASSIFICATION AND PACKAGING. 3M TRANSPORTATION CLASSIFICATIONS ARE BASED ON PRODUCT FORMULATION, PACKAGING, 3M POLICIES AND 3M UNDERSTANDING OF APPLICABLE CURRENT REGULATIONS. 3M DOES NOT GUARANTEE THE ACCURACY OF THIS CLASSIFICATION INFORMATION. THIS INFORMATION APPLIES ONLY TO TRANSPORTATION CLASSIFICATION AND NOT THE PACKAGING, LABELING, OR MARKING REQUIREMENTS. THE ORIGINAL 3M PACKAGE IS CERTIFIED FOR U.S. GROUND SHIPMENT ONLY. IF YOU ARE SHIPPING BY AIR OR OCEAN, THE PACKAGE MAY NOT MEET APPLICABLE REGULATORY REQUIREMENTS.

-----SECTION 15: REGULATORY INFORMATION -----

US FEDERAL REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

311/312 HAZARD CATEGORIES:

FIRE HAZARD: NO

PRESSURE HAZARD: NO

REACTIVITY HAZARD: NO

IMMEDIATE HAZARD: YES

DELAYED HAZARD: YES

STATE REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

CHEMICAL INVENTORIES:

THIS PRODUCT IS AN ARTICLE AS DEFINED BY TSCA REGULATIONS, AND IS EXEMPT FROM TSCA INVENTORY LISTING REQUIREMENTS.

CONTACT 3M FOR MORE INFORMATION.

INTERNATIONAL REGULATIONS: CONTACT 3M FOR MORE INFORMATION.

THIS MSDS HAS BEEN PREPARED TO MEET THE U.S. OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.

-----SECTION 16: OTHER INFORMATION -----

BARNES DISTRIBUTION

NFPA HAZARD CLASSIFICATION:

HEALTH 1
FLAMMABILITY 1
REACTIVITY 0
SPECIAL HAZARDS NONE

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS ARE DESIGNED FOR USE BY EMERGENCY RESPONSE PERSONNEL TO ADDRESS THE HAZARDS THAT ARE PRESENTED BY SHORT-TERM, ACUTE EXPOSURE TO A MATERIAL UNDER CONDITIONS OF FIRE, SPILL, OR SIMILAR EMERGENCIES. HAZARD RATINGS ARE PRIMARILY BASED ON THE INHERENT PHYSICAL AND TOXIC PROPERTIES OF THE MATERIAL BUT ALSO INCLUDE THE TOXIC PROPERTIES OF COMBUSTION OR DECOMPOSITION PRODUCTS THAT ARE KNOWN TO BE GENERATED IN SIGNIFICANT QUANTITIES.

REVISION CHANGES: NOT APPLICABLE

DISCLAIMER:

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Synonyms: C121350 C121351 C121352 C121353 KP151741 KP151742 KP151743 KP151744 KP151745
KP151749 273301 273303 273401 273402 273403 274201 274202 274203 274301
274302 274303 274401 274402 274403 276301 276302 276303 276401 276402 276403
373302 840281 840282 840283 840331 840332 840333 840381 840382 840383 840431
840432 840433 840481 840482 840483 842331 842332 842333 842431 842432 842433
845511 845512 845514 845611 845612 845614 845811 845812 845814

MATERIAL SAFETY DATA SHEET

STANDARD ABRASIVES(TM) RC A-XCRS/CRS/MED/VFN, BANDS, BELTS, DISCS, ROLLS,
QUICK CHANGE, THREADED HUB

01/20/11

SA
STANDARD ABRASIVES(TM)

MATERIAL SAFETY DATA SHEET

COPYING AND/OR DOWNLOADING OF THIS INFORMATION FOR THE PURPOSE OF PROPERLY
UTILIZING STANDARD ABRASIVES(TM) PRODUCTS IS ALLOWED PROVIDED THAT:

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WRITTEN AGREEMENT IS OBTAINED FROM THE MANUFACTURER, AND

(2) NEITHER THE COPY NOR THE ORIGINAL IS RESOLD OR OTHERWISE DISTRIBUTED
WITH THE INTENTION OF EARNING A PROFIT THEREON.

-----SECTION 1: PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT NAME:

STANDARD ABRASIVES(TM) RC A-XCRS/CRS/MED/VFN, BANDS, BELTS, DISCS, ROLLS,
QUICK CHANGE, THREADED HUB

MANUFACTURER: 3M

DIVISION: ABRASIVES SYSTEMS DIVISION

ADDRESS:
3M CENTER
ST. PAUL, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 OR (651) 737-6501 (24 HOURS)

ISSUE DATE: 20/11

SUPERCEDES E: 10/28/10

DOCUMENT GR: 28-2775-6

PRODUCT USE:
INTENDED USE: ABRASIVE PRODUCT

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-----SECTION 2: INGREDIENTS -----

INGREDIENT	C.A.S. NO.	% BY WT
ALUMINUM OXIDE MINERAL	1344-28-1	25 - 40
LUBRICANT	8002-74-2	0.2 - 4
ADDITIVE	13463-67-7	0.2 - 2
CURED RESIN	MIXTURE	10 - 50
NYLON FIBER	MIXTURE	10 - 35
CLOTH BACKING	25038-59-9	5 - 15
POLY(VINYL CHLORIDE)	9002-86-2	0.5 - 2.25
QUICK CHANGE ATTACHMENT: TP, TR, TS, THREADED HUB	MIXTURE	0 - 5

-----SECTION 3: HAZARDS IDENTIFICATION -----

3.1 EMERGENCY OVERVIEW:

ODOR, COLOR, GRADE: SOLID ABRASIVE PRODUCT

GENERAL PHYSICAL FORM: SOLID

IMMEDIATE HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS:
THIS DOCUMENT COVERS ONLY THE STANDARD ABRASIVES PRODUCT. FOR COMPLETE
ASSESSMENT, WHEN DETERMINING THE DEGREE OF HAZARD, THE MATERIAL BEING
ABRADED MUST ALSO BE CONSIDERED.

3.2 POTENTIAL HEALTH EFFECTS:

EYE CONTACT:

MECHANICAL EYE IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE PAIN, REDNESS, TEARING AND CORNEAL ABRASION.

DUST CREATED / GRINDING, SANDING, OR MACHINING MAY CAUSE EYE IRRITATION.
SIGNS/SYMPTOMS MAY INCLUDE REDNESS, SWELLING, PAIN, TEARING, AND BLURRED
OR HAZY VISION.

SKIN CONTACT:

MECHANICAL SKIN IRRITATION:
SIGNS/SYMPTOMS MAY INCLUDE ABRASION, REDNESS, PAIN, AND ITCHING.

INHALATION:

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DUST FROM GRINDING, SANDING OR MACHINING MAY CAUSE IRRITATION OF THE RESPIRATORY SYSTEM. SIGNS/SYMPTOMS MAY INCLUDE COUGH, SNEEZING, NASAL DISCHARGE, HEADACHE, HOARSENESS, AND NOSE AND THROAT PAIN.

PROLONGED OR REPEATED EXPOSURE MAY CAUSE:

PNEUMOCONIOSIS:

SIGN/SYMPTOMS MAY INCLUDE PERSISTENT COUGH, BREATHLESSNESS, CHEST PAIN, INCREASED AMOUNTS OF SPUTUM, AND CHANGES IN LUNG FUNCTION TESTS.

INGESTION: NO HEALTH EFFECTS ARE EXPECTED.

-----SECTION 4: FIRST AID MEASURES -----

4.1 FIRST AID PROCEDURES:

THE FOLLOWING FIRST AID RECOMMENDATIONS ARE BASED ON AN ASSUMPTION THAT APPROPRIATE PERSONAL AND INDUSTRIAL HYGIENE PRACTICES ARE FOLLOWED.

EYE CONTACT:

FLUSH EYES WITH LARGE AMOUNTS OF WATER. IF SIGNS/SYMPTOMS PERSIST, GET MEDICAL ATTENTION.

SKIN CONTACT:

WASH AFFECTED AREA WITH SOAP AND WATER. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

INHALATION:

REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

IF SWALLOWED: NO NEED FOR FIRST AID IS ANTICIPATED.

-----SECTION 5: FIRE FIGHTING MEASURES -----

5.1 FLAMMABLE PROPERTIES:

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS (LEL): NOT APPLICABLE

FLAMMABLE LIMITS (UEL): NOT APPLICABLE

5.2 EXTINGUISHING MEDIA:

ORDINARY COMBUSTIBLE MATERIAL. USE FIRE EXTINGUISHERS WITH CLASS A EXTINGUISHING AGENTS (E.G., WATER, FOAM).

5.3 PROTECTION OF FIRE FIGHTERS:

SPECIAL FIRE FIGHTING PROCEDURES:

WEAR FULL PROTECTIVE EQUIPMENT (BUNKER GEAR) AND A SELF-CONTAINED BREATHING APPARATUS (SCBA).

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UNUSUAL FIRE AND EXPLOSION HAZARDS:
NOT APPLICABLE. NONE INHERENT IN THIS PRODUCT.

NOTE:
SEE STABILITY AND REACTIVITY (SECTION 10) FOR HAZARDOUS COMBUSTION AND
THERMAL DECOMPOSITION INFORMATION.

-----SECTION 6: ACCIDENTAL RELEASE MEASURES -----

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
NOT APPLICABLE.

6.2. ENVIRONMENTAL PRECAUTIONS: NOT APPLICABLE.

CLEAN-UP METHODS: NOT APPLICABLE.

IN THE EVENT OF A RELEASE OF THIS MATERIAL, THE USER SHOULD DETERMINE
IF THE RELEASE QUALIFIES AS REPORTABLE ACCORDING TO LOCAL, STATE, AND
FEDERAL REGULATIONS.

-----SECTION 7: HANDLING AND STORAGE -----

7.1 HANDLING:

FOR INDUSTRIAL OR PROFESSIONAL USE ONLY. AVOID BREATHING OF DUST CREATED
BY SANDING, GRINDING OR MACHINING. AVOID EYE CONTACT WITH DUST OR
AIRBORNE PARTICLES. DAMAGED PRODUCT CAN BREAK APART DURING USE AND CAUSE
SERIOUS INJURY TO FACE OR EYES. CHECK PRODUCT FOR DAMAGE SUCH AS CRACKS
OR NICKS PRIOR TO USE. REPLACE IF DAMAGED. ALWAYS WEAR EYE AND FACE
PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR
SUCH OPERATIONS. SPARKS AND PARTICLES FLYING FROM THE PRODUCT DURING
SANDING OR GRINDING CAN CAUSE INJURY AND FIRE.

7.2 STORAGE: STORE IN A COOL, DRY PLACE.

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

8.1 ENGINEERING CONTROLS:

PROVIDE VENTILATION ADEQUATE TO CONTROL DUST CONCENTRATIONS BELOW
RECOMMENDED EXPOSURE LIMITS AND/OR CONTROL DUST. PROVIDE APPROPRIATE
LOCAL EXHAUST VENTILATION FOR SANDING, GRINDING OR MACHINING. USE
GENERAL DILUTION VENTILATION AND/OR LOCAL EXHAUST VENTILATION TO CONTROL
AIRBORNE EXPOSURES TO BELOW OCCUPATIONAL EXPOSURE LIMITS AND/OR CONTROL
DUST, FUME, OR AIRBORNE PARTICLES. IF VENTILATION IS NOT ADEQUATE, USE
RESPIRATORY PROTECTION EQUIPMENT.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE):

8.2.1 EYE/FACE PROTECTION:

AVOID EYE CONTACT. TO MINIMIZE THE RISK OF INJURY TO FACE AND EYES,

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ALWAYS WEAR EYE AND FACE PROTECTION WHEN WORKING AT SANDING OR GRINDING OPERATIONS OR WHEN NEAR SUCH OPERATIONS.

THE FOLLOWING EYE PROTECTION(S) ARE RECOMMENDED:
SAFETY GLASSES WITH SIDE SHIELDS.

8.2.2 SKIN PROTECTION:

AVOID SKIN CONTACT. WEAR APPROPRIATE GLOVES TO MINIMIZE RISK OF INJURY TO SKIN FROM CONTACT WITH DUST OR PHYSICAL ABRASION FROM GRINDING OR SANDING.

8.2.3 RESPIRATORY PROTECTION:

AVOID BREATHING OF DUST CREATED BY SANDING, GRINDING OR MACHINING. ASSESS EXPOSURE CONCENTRATIONS OF ALL MATERIALS INVOLVED IN THE WORK PROCESS. CONSIDER MATERIAL BEING ABRADED WHEN DETERMINING THE APPROPRIATE RESPIRATORY PROTECTION. SELECT AND USE APPROPRIATE RESPIRATORS TO PREVENT INHALATION OVEREXPOSURE.

SELECT ONE OF THE FOLLOWING NIOSH APPROVED RESPIRATORS BASED ON AIRBORNE CONCENTRATION OF CONTAMINANTS AND IN ACCORDANCE WITH OSHA REGULATIONS: HALF FACEPIECE OR FULLFACE AIR-PURIFYING RESPIRATOR WITH N95 PARTICULATE FILTERS. CONSULT THE CURRENT 3M RESPIRATORY SELECTION GUIDE FOR ADDITIONAL INFORMATION OR CALL 1-800-243-4630 FOR 3M TECHNICAL ASSISTANCE.

8.2.4 PREVENTION OF SWALLOWING:

NOT AN EXPECTED ROUTE OF EXPOSURE. WASH HANDS AFTER HANDLING AND BEFORE EATING.

8.3 EXPOSURE GUIDELINES:

INGREDIENT	AUTHORITY	TYPE	LIMIT	ADDITIONAL INFORMATION
ALUMINUM OXIDE MINERAL	CMRG	TWA	1 FIBER/CC	
ALUMINUM OXIDE MINERAL	OSHA	TWA, RESPIRABLE FRACTION	5 MG/M3	
ALUMINUM OXIDE MINERAL	OSHA	TWA, AS TOTAL DUST	15 MG/M3	
LUBRICANT	ACGIH	TWA, AS FUME	2 MG/M3	
CLOTH BACKI	CMRG	TWA, AS RESPIRABLE DUST	5 MG/M3	
CLOTH BACKING	CMRG	TWA, AS TOTAL DUST	10 MG/M3	

SOURCE OF EXPOSURE LIMIT DATA:

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ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

CMRG: CHEMICAL MANUFACTURER RECOMMENDED GUIDELINE

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

AIHA:
AMERICAN INDUSTRIAL HYGIENE ASSOCIATION WORKPLACE ENVIRONMENTAL EXPOSURE
LEVEL (WEEL)

-----SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES -----

ODOR, COLOR, GRADE: SOLID ABRASIVE PRODUCT

GENERAL PHYSICAL FORM: SOLID

AUTOIGNITION TEMPERATURE: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS (LEL): NOT APPLICABLE
FLAMMABLE LIMITS (UEL): NOT APPLICABLE

BOILING POINT: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

SPECIFIC GRAVITY: NOT APPLICABLE

pH: NOT APPLICABLE

MELTING POINT: NOT APPLICABLE

SOLUBILITY IN WATER: NOT APPLICABLE

EVAPORATION RATE: NOT APPLICABLE

KOW - OCT/WATER PARTITION COEF: NOT APPLICABLE

VISCOSITY: NOT APPLICABLE

-----SECTJ 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE.

MATERIALS AND CONDITIONS TO AVOID:
10.1 CONDITIONS TO AVOID: NONE KNOWN
10.2 MATERIALS TO AVOID: NONE KNOWN

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BARNES DISTRIBUTION

HAZARDOUS POLYMERIZATION: HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

SUBSTANCE	CONDITION
CARBON MONOXIDE	DURING COMBUSTION
CARBON DIOXIDE	DURING COMBUSTION

HAZARDOUS DECOMPOSITION:
UNDER RECOMMENDED USAGE CONDITIONS, HAZARDOUS DECOMPOSITION PRODUCTS ARE NOT EXPECTED. HAZARDOUS DECOMPOSITION PRODUCTS MAY OCCUR AS A RESULT OF OXIDATION, HEATING, OR REACTION WITH ANOTHER MATERIAL.

-----SECTION 11: TOXICOLOGICAL INFORMATION -----

PLEASE CONTACT THE ADDRESS LISTED IN SECTION 1 OF THIS MSDS FOR TOXICOLOGICAL INFORMATION ON THIS MATERIAL AND/OR ITS COMPONENTS.

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOTOXICOLOGICAL INFORMATION: NOT DETERMINED.

CHEMICAL FATE INFORMATION: NOT DETERMINED.

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

WASTE DISPOSAL METHOD:
THE SUBSTRATE THAT WAS ABRADED MUST BE CONSIDERED AS A FACTOR IN THE DISPOSAL METHOD FOR THIS PRODUCT. DISPOSE OF WASTE PRODUCT IN A SANITARY LANDFILL. AS A DISPOSAL ALTERNATIVE, DISPOSE OF WASTE PRODUCT IN A FACILITY PERMITTED TO ACCEPT CHEMICAL WASTE.

EPA HAZARDOUS WASTE NUMBER (RCRA): NOT REGULATED

SINCE REGULATIONS VARY, CONSULT APPLICABLE REGULATIONS OR AUTHORITIES BEFORE DISPOSAL.

-----SECTION 14: TRANSPORT INFORMATION -----

NOT REGULATED PER U.S. DOT, IATA OR IMO.

THESE TRANSPORTATION CLASSIFICATIONS ARE PROVIDED AS A CUSTOMER SERVICE. AS THE SHIPPER YOU REMAIN RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS, INCLUDING PROPER TRANSPORTATION CLASSIFICATION AND PACKAGING. THE MANUFACTURER'S CLASSIFICATIONS ARE BASED ON PRODUCT FORMULATION, PACKAGING, THE MANUFACTURER'S POLICIES AND UNDERSTANDING OF APPLICABLE CURRENT REGULATIONS. THE MANUFACTURER DOES NOT GUARANTEE THE

BARNES DISTRIBUTION

ACCURACY OF THIS CLASSIFICATION INFORMATION. THIS INFORMATION APPLIES ONLY TO TRANSPORTATION CLASSIFICATION AND NOT THE PACKAGING, LABELING, OR MARKING REQUIREMENTS. THE ORIGINAL STANDARD ABRASIVES PACKAGE IS CERTIFIED FOR U.S. GROUND SHIPMENT ONLY. IF YOU ARE SHIPPING BY AIR OR OCEAN, THE PACKAGE MAY NOT MEET APPLICABLE REGULATORY REQUIREMENTS.

-----SECTION 15: REGULATORY INFORMATION -----

US FEDERAL REGULATIONS: CONTACT MANUFACTURER FOR MORE INFORMATION.

311/312 HAZARD CATEGORIES:

FIRE HAZARD: NO
PRESSURE HAZARD: NO
REACTIVITY HAZARD: NO
IMMEDIATE HAZARD: YES
DELAYED HAZARD: YES

SECTION 313 TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF THAT SECTION AND 40 CFR PART 372 (EPCRA):

INGREDIENT	C.A.S. NO	% BY WT
ALUMINUM OXIDE MINERAL	1344-28-1	25 - 40

STATE REGULATIONS: CONTACT MANUFACTURER FOR MORE INFORMATION.

CHEMICAL INVENTORIES:

THIS PRODUCT IS AN ARTICLE AS DEFINED BY TSCA REGULATIONS, AND IS EXEMPT FROM TSCA INVENTORY LISTING REQUIREMENTS. CONTACT MANUFACTURER FOR MORE INFORMATION.

INTERNATIONAL REGULATIONS: CONTACT MANUFACTURER FOR MORE INFORMATION.

THIS MSDS HAS BEEN PREPARED TO MEET THE U.S. OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.

-----SECTION 16: OTHER INFORMATION -----

NFPA HAZARD CLASSIFICATION:

HEALTH 1
FLAMMABILITY 1
REACTIVITY 0
SPECIAL HAZARD NONE

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD RATINGS ARE DESIGNED FOR USE BY EMERGENCY RESPONSE PERSONNEL TO ADDRESS THE HAZARDS THAT ARE PRESENTED BY SHORT-TERM, ACUTE EXPOSURE TO A MATERIAL UNDER CONDITIONS OF FIRE, SPILL, OR SIMILAR EMERGENCIES. HAZARD RATINGS ARE PRIMARILY BASED ON THE INHERENT PHYSICAL AND TOXIC PROPERTIES OF THE MATERIAL BUT ALSO INCLUDE THE TOXIC PROPERTIES OF COMBUSTION OR DECOMPOSITION PRODUCTS THAT ARE KNOWN TO BE GENERATED IN SIGNIFICANT QUANTITIES.

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REVISION CHANGES:

SECTION 1: PRODUCT NAME WAS MODIFIED.

COPYRIGHT WAS MODIFIED.

SECTION 8: RESPIRATORY PROTECTION INFORMATION WAS MODIFIED.

MSDS HEADING: PRODUCT NAME WAS MODIFIED.

SECTION 9: BOILING POINT INFORMATION WAS MODIFIED.

SECTION 5: FLAMMABLE LIMITS (UE) INFORMATION WAS MODIFIED.

SECTION 5: FLAMMABLE LIMITS (LEL) INFORMATION WAS MODIFIED.

SECTION 9: FLAMMABLE LIMITS (LEL) INFORMATION WAS MODIFIED.

SECTION 9: FLAMMABLE LIMITS (UEL) INFORMATION WAS MODIFIED.

SECTION 6: 6.2. ENVIRONMENTAL PRECAUTIONS HEADING WAS MODIFIED.

SECTION 6:

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES HEADING WAS MODIFIED.

DISCLAIMER:

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THE MANUFACTURER PROVIDES INFORMATION IN ELECTRONIC FORM AS A SERVICE TO ITS CUSTOMERS. DUE TO THE REMOTE POSSIBILITY THAT ELECTRONIC TRANSFER MAY HAVE RESULTED IN ERRORS, OMISSIONS OR ALTERATIONS IN THIS INFORMATION, THE MANUFACTURER MAKES NO REPRESENTATIONS AS TO ITS COMPLETENESS OR ACCURACY. IN ADDITION, INFORMATION OBTAINED FROM A DATABASE MAY NOT BE AS CURRENT AS THE INFORMATION IN THE MSDS AVAILABLE DIRECTLY FROM THE MANUFACTURER.

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Synonyms: 10910 12370

**** MATERIAL SAFETY DATA SHEET ****

WHEEL BALANCE WEIGHTS

Part # MSDS21106

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: WHEEL BALANCE WEIGHTS

Product CAS: (none)

Product Code:

Synonyms: -21111-1; -21112-1; 10910; 12370; 21106; 21107; 21108; 21109; 21110; 21111; 21112; 21113; 21114; 21115; 21116; 21117; WHEEL BALANCE WEIGHTS

Company Identification:

Name: BOWMAN DISTRIBUTION

Address: 1301 E. 9TH ST., ST. 700

Address:

City: CLEVELAND State: OH Zip: 44114

For information, call: HEALTH AND TECHNICAL CONTACTS: HEALTH ISSUES AND TECHNICAL INFORMATION (8AM-5PM ET): 1-216-416-7200 X 5860

Emergency Number: ROCKY MOUNTAIN POISON CONTROL CENTER (24 HOURS EVERYDAY): 1-303-623-5716

Emergency Agency: CHEMTREC (24 HOURS EVERYDAY):

Number: 1-800-424-9300

MSDS Creation Date: 1/1/2003

Supersedes Date: 9/18/2000

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

Chemical Name	CAS	MIN	MAX
LEAD	7439-92-1	93	99
ANTIMONY	7440-36-0	0	6
ARSENIC	7440-38-2	0	.5
TIN	7440-31-5	0	.5
COPPER	7440-50-8	0	.1

Miscellaneous:

COATING MATERIAL: THERE ARE NO HAZARDS INGREDIENTS IN THE COATING SINCE THE COATING ENCAPSULATES THE LEAD AND ITS INORGANIC COMPOUND, COATED WHEEL BALANCE WEIGHTS ARE NOT CONSIDERED TO BE HAZARDOUS UNDER NORMAL USAGE.

INGREDIENT	OSHA PEL (MG/M3)	ACGIH TLV (MG/M3)	OTHER
LEAD	0.05	0.15	N.A.
ANTIMONY	0.5	0.5	N.A.
ARSENIC	0.01	0.2	N.A.
TIN	--	2	N.A.
COPPER	0.1	0.1	N.A.

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Lbs of VOC per Gallon Coating (minus water): 0
Coating Density (lbs/gal): 0
Solvent Density (lbs/gal): 0
Percent Solvent (volume): 0
Percent Solids (volume): 0
Percent Water (volume): 0

**** SECTION 3 - HAZARDS IDENTIFICATION ****

NFPA: Health: Fire: Reactivity: Other:
HMIS: Health: Fire: Reactivity: Special Protection:

Miscellaneous:
HMIS AND NFPA HAZARD RATINGS:

CATEGORY: HMIS / NFPA
ACUTE HEALTH: N.D. / N.D.
FLAMMABILITY: N.D. / N.D.
REACTIVITY: N.D. / N.D.
PERSONAL PROT.: N.D.
SPECIFIC HAZ.: N.D.

POTENTIAL HEALTH EFFECTS

Target Organs:
PRIMARY ROUTES OF EXPOSURE:
INHALATION-POSSIBLE,
INGESTION-POSSIBLE,
SKIN-NO.

Eye:
SIGNS AND SYMPTOMS OF EXPOSURE: EYE CONTACT MAY CAUSE MECHANICAL IRRITATION.

Skin:
SIGNS AND SYMPTOMS OF EXPOSURE: LEAD IS NOT READILY ABSORBED THROUGH THE SKIN, HOWEVER, IT MAY CAUSE MECHANICAL IRRITATION TO THE SKIN. DERMATITIS MAY RESULT FROM REPEATED SKIN CONTACT WITH ANTIMONY, ARSENIC OR TIN COMPOUNDS.

Ingestion:
SIGNS AND SYMPTOMS OF EXPOSURE: INGESTION CAN CAUSE ABSORPTION THROUGH THE DIGESTIVE SYSTEM.

Inhalation:
SIGNS AND SYMPTOMS OF EXPOSURE: INHALATION CAN CAUSE RESPIRATORY TRACT IRRITATION. IT CAN BE ABSORBED THROUGH THE LUNGS AND UPPER RESPIRATORY TRACT.

Miscellaneous:
CONDITIONS TO AVOID: N.A.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: DISEASES OF THE LIVER, KIDNEYS OR NERVOUS SYSTEM. SKIN DISORDERS MAY BE MORE SUSCEPTIBLE TO IRRITATION.

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HEALTH HAZARDS (ACUTE AND CHRONIC-INCLUDE ORGAN EFFECTS):

IF FUMES ARE GENERATED BY HEATING TO HIGH TEMPERATURES (800 F - 900 F) AND IF OVEREXPOSURE OCCURS, THE ACUTE SYMPTOMS ARE: WEAKNESS, VOMITING, LOSS OF APPETITE, UNCOORDINATED BODY MOVEMENT, CONVULSIONS, STUPOR, BLOODY STOOLS, AND POSSIBLE COMA.

CHRONIC: PROLONGED EXPOSURE ABOVE THE OSHA PEL LIMITS MAY CAUSE WEAKNESS, INSOMNIA, HYPERTENSION, SLIGHT IRRITATION TO SKIN AND EYES, METALLIC TASTE IN MOUTH, ANEMIA, CONSTIPATION, HEADACHE, MUSCLE AND JOINT PAINS, NEUROMUSCULAR DYSFUNCTION, POSSIBLE PARALYSIS, ENCEPHALOPATHY, AND PNEUMOCONIOSIS. THERE IS DANGER IN THE CUMULATIVE EFFECTS OF LEAD.

**** SECTION 4 - FIRST AID MEASURES ****

Eye:
FLUSH WITH LARGE QUANTITIES OF WATER. GET IMMEDIATE MEDICAL ATTENTION.

Skin:
WASH THOROUGHLY WITH SOAP AND WATER.

Ingestion:
GET IMMEDIATE MEDICAL ATTENTION.

Inhalation:
REMOVE FROM EXPOSURE. GET MEDICAL ATTENTION IF EXPERIENCING EFFECTS OF OVEREXPOSURE.

Notes to Physician:

**** SECTION 5 - FIRE FIGHTING MEASURES ****

Unusual Fire and Explosion Hazards:
MOLTEN METALS PRODUCE FUME, DUST, OR MIST THAT MAY BE TOXIC AND/OR RESPIRATORY IRRITANTS. THE METAL OR THE DUST MAY REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS.

Special Fire Fighting Procedures:
USE APPROVED FULL-FACE PIECE, SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING.

Extinguishing Media:
DRY CHEMICAL OR CARBON DIOXIDE SHOULD BE USED ON SURROUNDING FIRE. DO NOT USE WATER ON FIRES WHERE MOLTEN METAL IS PRESENT.

Flash Point:
N.A.

Flammable Limits:
Lower Limit:
(%): N.A.
Upper Limit:
(%): N.A.

AutoIgnition Temperature:

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General Information:

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

Disposal:

MATERIALS SHOULD BE RECYCLED IF AT ALL POSSIBLE. COLLECT AND RETURN TO AN AUTHORIZED RECYCLING CENTER OR TO A SECONDARY LEAD SMELTER. COLLECTION, TRANSPORTATION, STORAGE OR DISPOSAL SHOULD BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

Spills/Leaks:

NORMALLY THERE IS NO DUST OR PARTICULATE ASSOCIATED WITH COATED WEIGHT. COLLECT DAMAGED OR OUSED WEIGHTS AND PLACE IN CONTAINER FOR RECYCLING. DUST OR PARTICULATE SHOULD BE VACUUMED OR WET SWEEPED WHERE VACUUMING IS INFEASIBLE. DRY DUST SHOULD BE HANDLED USING CONTROLS WHICH MINIMIZE FUGITIVE EMISSIONS AND REENTRY OF DUST INTO THE WORK AREA. PLACE MATERIAL IN DRY CLOSED CONTAINERS FOR DISPOSAL OR RECYCLING. DO NOT USE COMPRESSED AIR OR DRY SWEEPING FOR CLEANING. USE APPROVED RESPIRATORY PROTECTION IF THE POSSIBILITY OF DUST, FUME, OR MIST EXPOSURE EXISTS.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:

SEE "STORAGE" BELOW.

Storage:

STORE IN A DRY AREA WHERE ACCIDENTAL CONTACT WITH ACIDS, BASES, HYDROGEN PEROXIDE, OR HALOGEN GASES IS NOT POSSIBLE. WASHING HANDS, FACE, NECK AND ARMS THOROUGHLY BEFORE EATING OR SMOKING IS RECOMMENDED.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:

VENTILATION: LOCAL EXHAUST: SHALL BE PROVIDED IN AREAS WHERE EXPOSURES EXCEED THE PEL.
MECHANICAL: RECOMMENDED.

Eyes:

GLASSES SHOULD BE USED FOR OPERATIONS GENERATING FLYING PIECES. USE GOGGLES AROUND MOLTEN METAL.

Skin:

NOT REQUIRED.

Clothing:

OTHER PROTECTIVE EQUIPMENT: HARD HAT, SAFETY SHOES, AND OTHER SAFETY EQUIPMENT SHOULD BE WORN AS APPROPRIATE FOR THE ENVIRONMENT.

Respirators:

NORMALLY THERE IS NO DUST OR PARTICULATE ASSOCIATED WITH COATED WHEEL WEIGHTS.

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**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Appearance/Odor:

SILVER, GRAY, ODORLESS METAL. VARIOUS SHAPES AND SIZES. COLOR OF THE COATING IS SILVER OR BLACK.

pH: N.A.

Vapor Pressure: N.A.

Vapor Density: (AIR = 1): N.A.

Evaporation Rate: (ETHER=1): N.A.

Viscosity:

Boiling Point: 2700 F; 1482 C.

Freezing/Melting Point: FREEZING POINT: N.A.

Decomposition Temperature:

Solubility: IN WATER: NEGLIGIBLE

Specific Gravity: 11.3

Molecular Formula:

Molecular Weight:

Miscellaneous:

SPECIFIC GRAVITY (WATER = 1): 9.7-11.3 APPROX.

% VOLATILE BY VOLUME: N.A.

% VOLATILE BY WEIGHT: N.A.

COEFFICIENT WATER/OIL DIST.: N.A.

% SOLID BY WEIGHT (%): 100%

VOC(AS PACKAGED MINUS WATER): N.A.

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:

STABLE.

Conditions to Avoid:

Incompatibilities with Other Materials:

HALOGEN GASES, OXIDIZERS OF ACIDS, OR HYDROGEN PEROXIDE MAY REACT VIOLENTLY UNDER REDUCING CONDITIONS (STRONG ACID OR BASE AND AN ACTIVE METAL) OR IN PRESENCE OF NASCENT HYDROGEN, HIGHLY TOXIC STIBINE OR ARSINE GAS (TLV 0.05 PPM) MAY BE EVOLVED.

Hazardous Decomposition Products:

TEMPERATURES ABOVE THE MELTING POINT MAY PRODUCE LEAD OXIDE DUST AND/OR FUMES.

Hazardous Polymerization:

WILL NOT OCCUR.

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**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

Toxicological Information:

CARCINOGENICITY: ARSENIC IS LISTED AS A CARCINOGEN BY THE NTP, IARC, OSHA AND NIOSH.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecological Information:

NO DATA AVAILABLE.

**** SECTION 13 - OTHER PRECAUTIONS ****

Other Precautions:

REASONABLE CARE AND CAUTION. THIS MATERIAL IS INTENDED FOR INDUSTRIAL USE; IT MUST BE ISOLATED FROM CHILDREN AND THEIR ENVIRONMENT. DO NOT EAT, DRINK, OR SMOKE IN WORK AREAS. WORK CLOTHES AND EQUIPMENT SHOULD REMAIN IN DESIGNATED AREAS AND SHOULD NEVER BE TAKEN HOME OR LAUNDERED WITH PERSONAL CLOTHING. DO NOT USE COMPRESSED AIR FOR BLOWING DUST OFF CLOTHING.

Work/Hygienic Practices:

**** SECTION 14 - TRANSPORT INFORMATION ****

Transportation Information:

DOT SHIPPING NAME: N.A.

HAZARD CLASS OR DIVISION: NONE.

CARTON MARKINGS: NONE.

IDENTIFICATION NUMBER: NONE

PACKING GROUP: NONE

Label Information:

**** SECTION 15 - REGULATORY INFORMATION ****

Regulatory Information:

TSCA STATUS: ALL COMPONENTS ARE EITHER LISTED OR ARE EXEMPT FROM LISTING ON THE TSCA LIST.

CANADIAN WHMIS CLASSIFICATION: N.D.

SARA TITLE III:

ORDER NO: 3557217 RELEASE NO: 001 MSDS NO: MSDS21106

BARNES DISTRIBUTION

HAZARD CATEGORIES:
ACUTE HEALTH: YES
CHRONIC HEALTH: YES
FIRE HAZARD: NO
PRESSURE HAZARD: NO

REPORTABLE INGREDIENTS:
SECTION 302/303: NONE.
SECTION 313: NONE.

CERCLA RQ: LEAD IS SUBJECT TO RELEASE REPORTING UNDER SECTION 313 OF SARA TITLE III.
REPORTABLE QUANTITY IS 1 LB. RELEASES TO AIR, LAND OR WATER WHICH EXCEED THE RQ MUST BE
REPORTED TO THE NATIONAL RESPONSE CENTER AT (800) 424-8802.

CALIFORNIA PROPOSITION 65: WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF
CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM.

**** SECTION 16 - ADDITIONAL INFORMATION ****

Additional Information:

N.A.=NOT APPLICABLE
N.D.=NOT DETERMINED
N.E.=NOT ESTABLISHED

REVISION SUMMARY: PREPARED SEPTEMBER 18, 2000.

ORDER NO: 4705283 RELEASE NO: 002 MSDS NO: 022243

BARNES DISTRIBUTION

Synonyms: -23549-4 -23550-4 -23551-4 -23552-4 -23553-4 -23556-4 23549 23550 23551
23552 23553 23554 23555 23556

CYG
LET'S MAKE IT SAFER

MATERIAL SAFETY DATA SHEET

CYG ELECTRONICS (SHANGHAI) CO., LTD.
ADDRESS: JIADING DISTRICT, SHANGHAI JIA GOOD ROAD 1690
ZIP: 201802
PHONE: (021) 69978836 69978835
FAX: 021-69978838

-----1. PRODUCT AND COMPANY IDENTIFICATION -----

PRODUCT:

PRODUCT NAME: HEAT SHRINKABLE TUBE

GRADE: CB-DWT DUAL-WALL CB-DWT (H)

COMPANY IDENTIFICATION:

SUPPLIER: SHANGHAI CHANGYUAN ELECTRONIC MATERIAL CO., LTD.

ADDRESS:
NO.366#, XIANGHUANG ROAD
NANXIANG TOWN, JIADING, SHANGHAI
CHINA

DEPARTMENT: TECH & QUALITY DEPT

TELEPHONE NO: 86-21-69121491

FAX NO: 86-21-59123014

DATE: FEB 1, 2012

PREPARED BY: MR LEI

-----2. COMPOSITION/INFORMATION ON INGREDIENTS -----

CHEMICAL NAME OF THE OUTER: POLYETHYLENE

COMPOSITION: MORE THAN 98%

CHEMICAL FORMULA: $-[CH_2-CH_2-]_n$

CONTAINS:
BLACK: 2%

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CHEMICAL NAME OF THE LINER: ETHYLENE VINYL ACETATE COPOLYMERS

-----3. HAZARDS IDENTIFICATION -----

HAZARDS WARNING IS NOT REQUIRED.

IT IS HARMLESS IN THE NORMAL STATION.

HAZARDS WARNING IS NOT REQUIRED.

-----4. FIRST-AID MEASURES -----

EYE CONTACT:

FLUSH THE EYES WITH PLENTY OF WATER WITHOUT RUBBING THE EYES WITH HANDS.
GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

SKIN CONTACT:

WASH CONTAMINATED SKIN WITH SOAP AND WATER AFTER CONTACT WITH PROCESSING
VAPORS AND FUMES. IMMEDIATELY COOL CONTAMINATED SKIN WITH WATER AND GET
MEDICAL AFTER CONTACT WITH MELTON RESIN.

INHALATION:

IF FUMES ARE INHALED, REMOVE THE PERSON TO FRESH AIR. IF BREATHING IS
DIFFICULT, GET MEDICAL ATTENTION.

INGESTION:

THIS PRODUCT DOES NOT SHOW SIGNIFICANT ACUTE TOXICITY. GET MEDICAL ATTENTION
IF CONSIDERABLE AMOUNTS OF THIS PRODUCT ARE INGESTED.

-----5. FIRE-FIGHTING MEASURES -----

SPECIAL FIREFIGHTING PROCEDURES:

THIS PRODUCT IS A SELF-EXTINGUISH THERMOPLASTIC MATERIAL AND WHEN IGNITED
IT WILL RELEASE BLACK FUMES.

EXTINGUISHING MEDIA: WATER SPRAY OR OTHER CLASS A EXTINGUISHING AGENT.

SKIN CONTACT:

THE MELTING MATERIAL WILL CAUSE SKIN-BURN. SO WHEN INJURED, THEY MUST WENT
FOR DOCTORS.

-----6. ACCIDENTAL RELEASE MEASURES -----

PERSONAL PRECAUTIONS: NOT APPLICABLE

ENVIRONMENTAL PRECAUTIONS: NOT APPLICABLE

METHODS FOR CLEANING UP: NOT APPLICABLE

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-----7. HANDLING AND STORAGE -----

HANDLING AND STORAGE:

THIS PRODUCT IN PLACE WHERE ARE NO EXPOSURE TO DIRECT SUNLIGHT OR ELEVATED TEMPERATURE OR THERE ARE NO IGNITION SOURCES. WHEN THE TEMPERATURE IS ABOVE 60 DEG. C IS LASTED FOR A LONG TIME, THE TUBE WILL SHRINK.

-----8. EXPOSURE CONTROLS/PERSONAL PROTECTION -----

ENGINEERING MEASURE:

CONTROL PARAMETERS:

PERSONAL PROTECTIVE EQUIPMENT:

SPECIFIC HYGIENE MEASURES:

-----9. PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE: TUBE

BOILING POINT: NOT APPLICABLE

FLASH POINT: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

MELTING POINT: NOT APPLICABLE

SPECIFIC GRAVITY: 1.3 G/CM3

OXIDIZIBILITY: NONE UNDER NORMAL HANDLING CONDITIONS

EXPLOSION LIMIT: NOT APPLICABLE

SOLUBILITY IN WATER: NEGLIGIBLE

ODOR: ACID

-----10. STABILITY & REACTIVITY -----

THERMAL DECOMPOSITION: DECOMPOSITION BEGINS AT 300 DEG. C

REACTIVITY WITH WATER: NONE

SELF-REACTIVITY: NONE

HAZARDOUS REACTIONS: NO HAZARDOUS REACTION OBSERVED.

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-----11. TOXICOLOGICAL INFORMATION -----

SKIN CORROSIVITY: NONE

IRITATION: NONE

ACUTE TOXICITY: NOT KNOW

SUB-ACUTE TOXICITY: NOT KNOW

CHRONIC TOXICITY: NOT KNOW

MUTAGENIC EFFECTS: NOT KNOW

-----12. ECOLOGICAL INFORMATION -----

BIODEGRADABILITY: THIS PRODUCT IS NOT BIODEGRADABLE.

BIOACCUMULATION: THIS PRODUCT IS NOT BIOACCUMULATION

FISH TOXICITY: NOT KNOW.

-----13. DISPOSAL CONSIDERATIONS -----

DISPOSE OF WASTE BY INCINERATION, SANITARY LANDFILL OR OTHER METHOD IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS.

CONSULT YOUR ATTORNEY OR APPROPRIATE REGULATORY OFFICIALS FOR INFORMATION ON SUCH DISPOSAL.

-----14. TRANSPORT INFORMATION -----

UN NO:

DECLARATION FOR LAND SHIPMENT:

DECLARATION FOR SEA SHIPMENT:

DECLARATION FOR SHIPMENT BY AIR: NOT DANGEROUS CARGO. KEEP DRY.

-----15. REGULATORY INFORMATION -----

LABELLING ACCORDING TO EEC DIRECTIVE: NOT REQUIRED.

-----16. OTHER INFORMATION -----

THE DATA GIVEN HERE IS BASED ON CURRENT KNOWLEDGE AND EXPERIENCE. THE PURSE

ORDER NO: 4705283 RELEASE NO: 002 MSDS NO: 022243

BARNES DISTRIBUTION
OF THIS SAFETY DATA SHEET IS TO DESCRIBE THE PRODUCTS IN TERMS OF THEIR SAFETY
REQUIREMENTS. THE DATA DOES NOT SIGNIFY ANY WARRANTY WITH REGARD TO THE
PRODUCT'S PROPERTIES.

Q-MRO

ORDER NO: 6021542 RELEASE NO: 001 MSDS NO: 044410

BARNES DISTRIBUTION

Synonyms: BD1496 BD1496-1
MATERIAL SAFETY DATA SHEET

-----SECTION 1: PRODUCT & COMPANY IDENTIFICATION -----

PRODUCT NAME: BARNES INDUSTRIAL GLASS CLEANER (AEROSOL)

PRODUCT NUMBER (S): BD1496

PRODUCT USE: GLASS CLEANER

MANUFACTURER / SUPPLIER CONTACT INFORMATION:

BARNES DISTRIBUTION
THE GALLERIA / TOWER AT ERIEVIEW
1301 EAST 9TH STREET, STE #700
CLEVELAND, OH 44114

GENERAL INFORMATION: (866) 438-6767 M-F 8AM - 5PM

24-HR EMERGENCY:

(303) 623-5716
(877) 740-5015

-----SECTION 2: HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW:

CAUTION: MAY CAUSE EYE IRRITATION. CONTENTS UNDER PRESSURE.

APPEARANCE & ODOR: CLEAR LIQUID, AMMONIA ODOR

POTENTIAL HEALTH EFFECTS:

ACUTE EFFECTS:

EYE: MAY CAUSE MILD IRRITATION INCLUDING REDNESS AND BURNING.

SKIN:

NO ADVERSE EFFECTS EXPECTED FOR A SINGLE EXPOSURE. PROLONGED OR REPEATED CONTACT CAN CAUSE IRRITATION AND DEFATTING OF THE SKIN.

INHALATION:

INHALATION OF A SMALL AMOUNT IS NOT EXPECTED TO CAUSE HEALTH EFFECTS. PROLONGED EXPOSURE MAY CAUSE DIZZINESS OR THROAT IRRITATION.

INGESTION:

INGESTION OF A SMALL AMOUNT IS NOT EXPECTED TO CAUSE HEALTH EFFECTS. INGESTION OF A LARGER AMOUNT MAY CAUSE IRRITATION TO GASTROINTESTINAL TRACT AS WELL AS MORE SEVERE HEALTH EFFECTS INCLUDING BLOOD DISORDERS.

CHRONIC EFFECTS: NONE KNOWN

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TARGET ORGANS:
BY INGESTION: BLOOD, LIVER, KIDNEYS

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:
PRE-EXISTING SKIN OR EYE DISORDERS

SEE SECTION 11 FOR TOXICOLOGY AND CARCINOGENICITY INFORMATION ON PRODUCT INGREDIENTS.

-----SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS -----

COMPONENT	CAS NUMBER	% BY WT.
WATER	7732-18-5	85 - 95
LIQUEFIED PETROLEUM GAS	68476-86-8	3 - 8
2-BUTOXYETHANOL	111-76-2	2 - 3
ETHANOL	64-17-5	1 - 2
AMMONIUM HYDROXIDE SOLUTION	1336-21-6	1 - 2

-----SECTION 4: FIRST AID MEASURES -----

EYE CONTACT:
IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. CALL A PHYSICIAN IF IRRITATION PERSISTS.

SKIN CONTACT:
REMOVE CONTAMINATED CLOTHING AND WASH AFFECTED AREA WITH SOAP AND WATER. CALL A PHYSICIAN IF IRRITATION PERSISTS. WASH CONTAMINATED CLOTHING PRIOR TO RE-USE.

INHALATION:
REMOVE PERSON TO FRESH AIR. KEEP PERSON CALM. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT GIVE OXYGEN. CALL A PHYSICIAN.

INGESTION: DO NOT INDUCE VOMITING. CALL A PHYSICIAN.

NOTE TO PHYSICIANS:
THIS PRODUCT CONTAINS 2-BUTOXYETHANOL WHICH, IF INGESTED IN SIGNIFICANT QUANTITIES, MAY RESULT IN RED BLOOD CELL HEMOLYSIS.

-----SECTION 5: FIRE-FIGHTING MEASURES -----

FLAMMABLE PROPERTIES:
THIS PRODUCT IS NOT FLAMMABLE IN ACCORDANCE WITH AEROSOL FLAMMABILITY

BARNES DISTRIBUTION

DEFINITIONS. (SEE 16 CFR 1500.3(C)(6)).

FLASH POINT: NONE

AUTOIGNITION TEMPERATURE: NONE

UPPER EXPLOSIVE LIMIT: ND

LOWER EXPLOSIVE LIMIT: ND

FIRE AND EXPLOSION DATA:

SUITABLE EXTINGUISHING MEDIA:

USE EXTINGUISHING AGENTS APPROPRIATE FOR SURROUNDING FIRE.

PRODUCTS OF COMBUSTION: NONE

EXPLOSION HAZARDS:

AEROSOL CONTAINERS, WHEN EXPOSED TO HEAT FROM FIRE, MAY BUILD PRESSURE AND EXPLODE.

PROTECTION OF FIRE-FIGHTERS:

FIREFIGHTERS SHOULD WEAR SELF-CONTAINED, NIOSH-APPROVED BREATHING APPARATUS FOR PROTECTION AGAINST SUFFOCATION AND POSSIBLE TOXIC DECOMPOSITION PRODUCTS. PROPER EYE AND SKIN PROTECTION SHOULD BE PROVIDED. USE WATER SPRAY TO KEEP FIRE-EXPOSED CONTAINERS COOL AND TO KNOCK DOWN VAPORS WHICH MAY RESULT FROM PRODUCT DECOMPOSITION.

-----SECTION 6: ACCIDENTAL RELEASE MEASURES -----

PERSONAL PRECAUTIONS: USE PERSONAL PROTECTION RECOMMENDED IN SECTION 8.

ENVIRONMENTAL PRECAUTIONS:

TAKE PRECAUTIONS TO PREVENT CONTAMINATION OF GROUND AND SURFACE WATERS. DO NOT FLUSH INTO SEWERS OR STORM DRAINS.

METHODS FOR CONTAINMENT & CLEAN-UP:

DIKE AREA TO CONTAIN SPILL. VENTILATE THE AREA WITH FRESH AIR. IF IN CONFINED SPACE OR LIMITED AIR CIRCULATION AREA, CLEAN-UP WORKERS SHOULD WEAR APPROPRIATE RESPIRATORY PROTECTION. RECOVER OR ABSORB SPILLED MATERIAL USING AN ABSORBENT DESIGNED FOR CHEMICAL SPILLS. PLACE USED ABSORBENTS INTO PROPER WASTE CONTAINERS.

-----SECTION 7: HANDLING AND STORAGE -----

HANDLING PROCEDURES:

USE WITH ADEQUATE VENTILATION. AVOID CONTACT WITH SKIN AND EYES. WASH HANDS AFTER USE. DO NOT EXPOSE AEROSOL CONTAINERS TO HEAT OR FLAME. DO NOT INCINERATE CONTAINER. USE CAUTION AROUND ENERGIZED EQUIPMENT. THE METAL CONTAINER WILL CONDUCT ELECTRICITY IF IT CONTACTS A LIVE SOURCE. THIS MAY RESULT IN INJURY TO THE USER FROM ELECTRICAL SHOCK AND/OR FLASH FIRE. FOR PRODUCT USE INSTRUCTIONS, PLEASE SEE THE PRODUCT LABEL.

BARNES DISTRIBUTION

STORAGE PROCEDURES:

STORE IN A COOL DRY AREA OUT OF DIRECT SUNLIGHT. AEROSOL CANS MUST BE MAINTAINED BELOW 120 DEG. F / 49 DEG. C TO PREVENT CANS FROM RUPTURING.

AEROSOL STORAGE LEVEL: I

-----SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION -----

EXPOSURE GUIDELINES:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
WATER	NE	NE	NE	NE	NE		
LIQUEFIED PETROLEUM GAS	1000	NE	1000	NE	NE		PPM
2-BUTOXYETHANOL	50 (S)	NE	20	NE	NE		PPM
AMMONIUM HYDROXIDE SOLUTION	NE	NE	NE	NE	NE		
ETHANOL	1000	NE	NE	1000			PPM

N.E. - NOT ESTABLISHED

(C) - CEILING

(S) - SKIN

(V) - VACATED

CONTROLS AND PROTECTION:

ENGINEERING CONTROLS:

AREA SHOULD HAVE VENTILATION TO PROVIDE FRESH AIR. LOCAL EXHAUST VENTILATION IS GENERALLY PREFERRED BECAUSE IT CAN CONTROL THE EMISSIONS OF THE CONTAMINANT AT THE SOURCE, PREVENTING DISPERSION INTO THE GENERAL WORK AREA. USE MECHANICAL MEANS IF NECESSARY TO MAINTAIN VAPOR LEVELS BELOW THE EXPOSURE GUIDELINES. IF WORKING IN A CONFINED SPACE, FOLLOW APPLICABLE OSHA REGULATIONS.

RESPIRATORY PROTECTION:

NONE REQUIRED FOR NORMAL WORK WHERE ADEQUATE VENTILATION IS PROVIDED. IF ENGINEERING CONTROLS ARE NOT FEASIBLE OR IF EXPOSURE EXCEEDS THE APPLICABLE EXPOSURE LIMITS, USE NIOSH-APPROVED SELF-CONTAINED POSITIVE PRESSURE RESPIRATORS IN LOW CIRCULATION AREAS AND FOR EMERGENCIES. AIR MONITORING IS NEEDED TO DETERMINE ACTUAL EMPLOYEE EXPOSURE LEVELS.

EYE/FACE PROTECTION:

FOR NORMAL CONDITIONS, WEAR SAFETY GLASSES. WHERE THERE IS REASONABLE PROBABILITY OF LIQUID CONTACT, WEAR SPLASH-PROOF GOGGLES.

SKIN PROTECTION:

ORDER NO: 6021542 RELEASE NO: 001 MSDS NO: 044410

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USE PROTECTIVE GLOVES SUCH AS NITRILE OR RUBBER. ALSO, USE FULL PROTECTIVE CLOTHING IF THERE IS PROLONGED OR REPEATED CONTACT OF LIQUID WITH SKIN.

-----SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES -----

PHYSICAL STATE: LIQUID

COLOR: CLEAR

ODOR: AMMONIA

ODOR THRESHOLD: ND

SPECIFIC GRAVITY: 0.9952

INITIAL BOILING POINT: APPROX. 212 DEG. F / 100 DEG. C

FREEZING POINT: APPROX. 30 DEG. F / -1 DEG. C

VAPOR PRESSURE: ND

VAPOR DENSITY: >1 (AIR = 1)

EVAPORATION RATE: SLOW

SOLUBILITY: SOLUBLE IN WATER

COEFFICIENT OF WATER/OIL DISTRIBUTION: ND

PH: 10.5

VOLATILE ORGANIC COMPOUNDS:

WT %: 9.6

G/L: 95.1

LBS./GAL: 0.8

-----SECTION 10: STABILITY AND REACTIVITY -----

STABILITY: STABLE

CONDITIONS TO AVOID:

KEEP AWAY FROM HEAT, DIRECT SUNLIGHT, OPEN FLAMES OR SPARKS. DROPPING OF CONTAINERS MAY CAUSE BURSTING.

INCOMPATIBLE MATERIALS: STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE

POSSIBILITY OF HAZARDOUS REACTIONS: NO

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-----SECTION 11: TOXICOLOGICAL INFORMATION -----

LONG-TERM TOXICOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT. THE FOLLOWING INFORMATION IS AVAILABLE FOR COMPONENTS OF THIS PRODUCT.

ACUTE TOXICITY:

COMPONENT	ORAL LD50 (RAT)	DERMAL LD50 (RABBIT)	INHALATION LC50 (RAT)
WATER	>90 ML/KG	NO DATA	NO DATA
LIQUEFIED PETROLEUM GAS	NO DATA	NO DATA	658 MG/L/4H
2-BUTOXYETHANOL	530 MG/KG	400 - 500 MG/KG	450 PPM/4H
AMMONIUM HYDROXIDE SOLUTION	350 MG/KG	NO DATA	NO DATA
ETHANOL	7060 MG/KG	NO DATA	20,000 PPM/10H

CHRONIC TOXICITY:

COMPONENT	OSHA CARCINOGEN	IARC CARCINOGEN	NTP CARCINOGEN	IRRITANT	SENSITIZER
WATER	NO	NO	NO	NO	NO
LIQUEFIED PETROLEUM GAS	NO	NO	NO	NO	NO
2-BUTOXYETHANOL	NO	NO	NO	EYE, SKIN	NO
AMMONIUM HYDROXIDE SOLUTION	NO	NO	NO	EYE, SKIN, RESPIRATORY	UNKNOWN
ETHANOL	NO	NO	NO	EYE	NO

REPRODUCTIVE TOXICITY: NO INFORMATION AVAILABLE

TERATOGENICITY: NO INFORMATION AVAILABLE

MUTAGENICITY: NO INFORMATION AVAILABLE

SYNERGISTIC EFFECTS: NO INFORMATION AVAILABLE

-----SECTION 12: ECOLOGICAL INFORMATION -----

ECOLOGICAL STUDIES HAVE NOT BEEN CONDUCTED FOR THIS PRODUCT. THE FOLLOWING INFORMATION IS AVAILABLE FOR COMPONENTS OF THIS PRODUCT.

ECOTOXICITY:

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2-BUTOXYETHANOL:

96 HR LC50, BLUEGILL SUNFISH: 1490 MG/L

24 HR LC50, DAPHNIA: 1720 MG/L

AMMONIUM HYDROXIDE:

48 HR EC50 WATER FLEA: 0.66 MG/L

PERSISTENCE / DEGRADABILITY:

OVER 98% OF PRODUCT INGREDIENTS ARE BIODEGRADABLE.

BIOACCUMULATION / ACCUMULATION: NO INFORMATION AVAILABLE

MOBILITY IN ENVIRONMENT: NO INFORMATION AVAILABLE

-----SECTION 13: DISPOSAL CONSIDERATIONS -----

WASTE CLASSIFICATION:

THE DISPENSED LIQUID PRODUCT IS NOT A RCRA HAZARDOUS WASTE. (SEE 40 CFR PART 261.20 - 261.33)

AEROSOL CONTAINERS SHOULD BE FULLY EMPTIED AND DEPRESSURIZED BEFORE DISPOSAL. EMPTY AEROSOL CONTAINERS MAY BE RECYCLED.

ALL DISPOSAL ACTIVITIES MUST COMPLY WITH FEDERAL, STATE, PROVINCIAL AND LOCAL REGULATIONS. LOCAL REGULATIONS MAY BE MORE STRINGENT THAN STATE, PROVINCIAL OR NATIONAL REQUIREMENTS.

-----SECTION 14: TRANSPORT INFORMATION -----

US DOT (GROUND): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, LIMITED QUANTITY**

ICAO/IATA (AIR): UN1950, AEROSOLS, NON-FLAMMABLE, 2.2, LIMITED QUANTITY

IMO/IMDG (WATER): UN1950, AEROSOLS, 2.2, LIMITED QUANTITY

SPECIAL PROVISIONS:

**THIS PRODUCT CAN BE CLASSIFIED AND LABELED AS 'CONSUMER COMMODITY, ORM-D' FOR DOMESTIC GROUND SHIPPING UNTIL JANUARY 1, 2014.

IF SHIPPING AS LIMITED QUANTITY BY GROUND, NOTE THAT SHIPPING PAPERS ARE NOT REQUIRED.

-----SECTION 15: REGULATORY INFORMATION -----

U.S. FEDERAL REGULATIONS:

TOXIC SUBSTANCES CONTROL ACT (TSCA):

ALL INGREDIENTS ARE EITHER LISTED ON THE TSCA INVENTORY OR ARE EXEMPT.

BARNES DISTRIBUTION
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT
(CERCLA):

REPORTABLE QUANTITIES (RQ'S) EXIST FOR THE FOLLOWING INGREDIENTS:
AMMONIUM HYDROXIDE (1000 LBS)

SPILLS OR RELEASES RESULTING IN THE LOSS OF ANY INGREDIENT AT OR ABOVE
ITS RQ REQUIRE IMMEDIATE NOTIFICATION TO THE NATIONAL RESPONSE CENTER
(800-424-8802) AND TO YOUR LOCAL EMERGENCY PLANNING COMMITTEE.

SUPERFUND AMENDMENTS REAUTHORIZATION ACT (SARA) TITLE III:
SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS): NONE

SECTION 311/312 HAZARD CATEGORIES:

FIRE HAZARD: NO
REACTIVE HAZARD: NO
RELEASE OF PRESSURE: YES
ACUTE HEALTH HAZARD: YES
CHRONIC HEALTH HAZARD: NO

SECTION 313 TOXIC CHEMICALS:

THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING
REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND
REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:
2-BUTOXYETHANOL (GLYCOL ETHERS CATEGORY): 2.85%

CLEAN AIR ACT:

SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPS): NONE

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION:

THIS PRODUCT IS REGULATED BY THE HAZARD COMMUNICATIONS STANDARD.

U.S. STATE REGULATIONS:

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROP 65):

THIS PRODUCT MAY CONTAIN THE FOLLOWING CHEMICALS KNOWN TO THE STATE OF
CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM:

METHANOL (0.07%)
METHYL ISOBUTYLKETONE (0.02%)
1,4-DIOXANE (<0.004 PPM)
ETHYLENE OXIDE (<0.001 PPM)

CONSUMER PRODUCTS VOC REGULATIONS:

IN STATES WITH CONSUMER PRODUCTS VOC REGULATIONS, THIS PRODUCT IS COMPLIANT
AS A GLASS CLEANER.

STATE RIGHT TO KNOW:

NEW JERSEY: 111-76-2, 68476-86-8, 1336-21-6
PENNSYLVANIA: 111-76-2, 68476-86-8, 1336-21-6
MASSACHUSETTS: 111-76-2, 68476-86-8, 1336-21-6
RHODE ISLAND: 111-76-2, 68476-86-8, 1336-21-6

CANADIAN REGULATIONS:

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CONTROLLED PRODUCTS REGULATIONS:

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CONTROLLED PRODUCTS REGULATIONS.

WHMIS HAZARD CLASS: A, D2B

CANADIAN DSL INVENTORY:

ALL INGREDIENTS ARE EITHER LISTED ON THE DSL INVENTORY OR ARE EXEMPT.

EUROPEAN UNION REGULATIONS:

ROHS COMPLIANCE:

THIS PRODUCT IS COMPLIANT WITH DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 27 JANUARY 2003. THIS PRODUCT DOES NOT CONTAIN ANY OF THE RESTRICTED SUBSTANCES AS LISTED IN ARTICLE 4(1) OF THE ROHS DIRECTIVE.

ADDITIONAL REGULATORY INFORMATION: NONE

-----SECTION 16: OTHER INFORMATION -----

HMIS(R*) (II):

HEALTH 1
FLAMMABILITY 0
REACTIVITY 0
PPE B

NFPA:

1
0
0

RATINGS RANGE FROM 0 (NO HAZARD) TO 4 (SEVERE HAZARD)

REVISION DATE: 07/25/2012

CHANGES SINCE LAST REVISION: FORMULA CHANGE TO REDUCE VOC CONTENT

THE INFORMATION CONTAINED IN THIS DOCUMENT APPLIES TO THIS SPECIFIC MATERIAL AS SUPPLIED. IT MAY NOT BE VALID FOR THIS MATERIAL IF IT IS USED IN COMBINATION WITH ANY OTHER MATERIALS. THIS INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE OR OBTAINED FROM SOURCES BELIEVED TO BE ACCURATE. BEFORE USING ANY PRODUCT, READ ALL WARNINGS AND DIRECTIONS ON THE LABEL. FOR FURTHER CLARIFICATION OF ANY INFORMATION CONTAINED ON THIS MSDS CONSULT YOUR SUPERVISOR, OR A HEALTH & SAFETY PROFESSIONAL.

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
CAS: CHEMICAL ABSTRACT SERVICE
CFR: CODE OF FEDERAL REGULATIONS
DOT: DEPARTMENT OF TRANSPORTATION
DSL: DOMESTIC SUBSTANCE LIST

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B A R N E S D I S T R I B U T I O N

G/L: GRAMS PER LITER
HMIS: HAZARDOUS MATERIALS IDENTIFICATION SYSTEM
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IATA: INTERNATIONAL AIR TRANSPORT ASSOCIATION
ICAO: INTERNATIONAL CIVIL AVIATION ORGANIZATION
IMDG: INTERNATIONAL MARITIME DANGEROUS GOODS
IMO: INTERNATIONAL MARITIME ORGANIZATION
LBS./GAL: POUNDS PER GALLON
LC: LETHAL CONCENTRATION
LD: LETHAL DOSE
NA: NOT APPLICABLE
ND: NOT DETERMINED
NIOSH: NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY & HEALTH
NFPA: NATIONAL FIRE PROTECTION ASSOCIATION
NTP: NATIONAL TOXICOLOGY PROGRAM
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PMCC: PENSKY-MARTENS CLOSED CUP
PPE: PERSONAL PROTECTION EQUIPMENT
PPM: PARTS PER MILLION
ROHS: RESTRICTION OF HAZARDOUS SUBSTANCES
STEL: SHORT TERM EXPOSURE LIMIT
TCC: TAG CLOSED CUP
TWA: TIME WEIGHTED AVERAGE
WHMIS: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

CTRL#: 09968/00411

ORDER NO: 6021542 RELEASE NO: 001 MSDS NO: 044412

BARNES DISTRIBUTION

Synonyms: 21990 21991
PACER(R*) TECHNOLOGY

INDUSTRIAL
PRIVATE LABEL

MATERIAL SAFETY DATA SHEET

9420 SANTA ANITA AVENUE
RANCHO CUCAMONGA, CA 91730
(909) 987-0550

CORP. OFFICE: (800) 538-3091

FAX: (909) 987-0490

WWW.PACERTECHNOLOGY.COM

FOR CHEMICAL EMERGENCY ONLY:
US & CANADA: (800) 424-9300
INT'L & WASH. DC: (703) 527-3887

-----1. PRODUCT IDENTIFICATION -----

PRODUCT ID: PL08052 - FSA ADHESIVE (21990, 21991)

-----2. COMPOSITION/INGREDIENTS -----

CHEMICAL NAME	CAS #	OSHA PEL	ACGIH TLV	OTHER LIMITS	WT. %
ETHYL CYANOACRYLATE	7085-85-0			0.2 PPM TWA	85-100
POLYMETHYL METHACRYLATE	9011-14-7				10-30
HYDROQUINONE	123-31-9	2 MG/M3	2 MG/M3		<0.5

-----3. HAZARDS IDENTIFICATION -----

	HMIS	NFPA
HEALTH	1	1
FLAMMABILITY	2	2
REACTIVITY	1	1
PHYSICAL HAZARD		

EMERGENCY OVERVIEW: CLEAR, COLORLESS LIQUID WITH IRRITATING ODOR.

CAUTION:

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BARNES DISTRIBUTION

BONDS SKIN & EYES IN SECONDS. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
AVOID CONTACT WITH CLOTHING AS CAN CAUSE BURN.

KEEP OUT OF REACH OF CHILDREN.

TOXICITY:
MAY CAUSE ALLERGIC SKIN REACTION WITH PROLONGED CONTACT. POSSIBLE SKIN SENSITIZER.

PRIMARY ROUTES OF ENTRY:

INHALATION: YES

SKIN: NO

EYES: YES

INGESTION:

SIGNS/SYMPTOMS OF EXPOSURE:

INHALATION: COUGHING, WHEEZING, ALLERGIC-TYPE REACTION

SKIN:
POSSIBLE REDNESS, IRRITATION; POSSIBLE DERMATITIS WITH PROLONGED OR REPEATED CONTACT.

EYES: WEEPING, REDNESS, IRRITATION

INGESTION:

ADHESIVE BECOMES SOLID IN CONTACT WITH SALIVA AND MAY ADHERE TO INSIDE OF MOUTH.

-----4. FIRST AID MEASURES -----

INHALATION:
REMOVE TO FRESH AIR. PROLONGED OR REPEATED ELEVATED EXPOSURE MAY CAUSE ALLERGIC REACTIONS WITH ASTHMA-LIKE SYMPTOMS IN SENSITIVE INDIVIDUALS.

SKIN:
WASH WITH SOAP & WATER. PEEL OR ROLL SKIN APART TO SEPARATE. ADHESIVE WEARS OFF OF SKIN WITH WATER EXPOSURE.

EYES:
IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR 15 MINUTES. GET IMMEDIATE MEDICAL ATTENTION. WATER FLUSHING AIDS IN SLOUGHING OFF ADHESIVE OVER TIME.

INGESTION:
PEEL OR ROLL SKIN APART. ADHESIVE BECOMES SOLID IN CONTACT WITH SALIVA & MAY ADHERE TO INSIDE OF MOUTH. SALIVA WILL LIFT ADHESIVE IN 1-2 DAYS. ADDITIONAL WATER EXPOSURE HELPS TO SPEED UP REMOVAL. AVOID SWALLOWING SOLID ADHESIVE AFTER DETACHMENT. NOT A TOXIC PRODUCT.

-----5. FIRE FIGHTING MEASURES -----

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BARNES DISTRIBUTION

FLASH POINT: 185 DEG. F / 85 DEG. C

LEL:
UEL:

EXTINGUISHING MEDIA:

USE DRY CHEMICAL EXTINGUISHER OR FLUSH WITH LARGE AMOUNTS OF WATER.

SPECIAL FIRE FIGHTING PROCEDURES:

AS IN ANY CHEMICAL FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS,
PRESSURE-DEMAND (NIOSH APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR.

HAZARDOUS PRODUCTS OF COMBUSTION:

COMBUSTIBLE BY: PRODUCTS OF CARBON MONOXIDE AND CARBON DIOXIDE.

UNUSUAL FIRE/EXPLOSION HAZARDS: ADHESIVE BECOMES SOLID IN CONTACT WITH WATER.

-----6. ACCIDENTAL RELEASE MEASURES -----

SPILL PROCEDURES:

POLYMERIZE WITH WATER. INCREASE VENTILATION TO AREA. SOLID MATERIAL MAY BE
SCRAPED FROM SURFACE.

-----7. HANDLING AND STORAGE -----

HANDLING:

USE IN WELL-VENTILATED AREA. AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
AVOID BREATHING (DUST, VAPOR, MIST). AVOID CONTACT WITH SKIN, EYE AND
CLOTHING. KEEP CONTAINER CLOSED WHEN NOT IN USE. PROTECT WORK SURFACES
WITH METAL FOIL.

STORAGE:

STORE IN A COOL PLACE IN ORIGINAL CONTAINER AND PROTECT FROM SUNLIGHT.
KEEP AWAY FROM SOURCES OF IGNITION.

IDEAL STORAGE: 41-50F. DO NOT STORE WITH FOOD PRODUCTS.

-----8. EXPOSURE CONTROL/PERSONAL PROTECTION -----

EYES: WITH POSSIBLE EYE/FACE CONTACT, WEAR SAFETY GLASSES.

SKIN: WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES (NEOPRENE).

VENTILATION:

USE IN WELL-VENTILATED AREA OR WEAR NIOSH FULL FACE RESPIRATOR WITH CARBON
CARTRIDGES.

OTHER:

FACILITIES STORING OR UTILIZING THIS MATERIAL SHOULD HAVE AN EYEWASH
FACILITY AND A SAFETY SHOWER.

B A R N E S D I S T R I B U T I O N

-----9. PHYSICAL & CHEMICAL PROPERTIES -----

APPEARANCE: CLEAR, TRANSPARENT, COLORLESS LIQUID

ODOR: IRRITATING ODOR

BOILING POINT: 365 F / 185 C

SPECIFIC GRAVITY (H2O=1): 1.05-1.08

SOLUBILITY IN WATER: INSOLUBLE, MATERIAL BECOMES SOLID.

MELTING POINT: NE

VAPOR DENSITY (AIR=1): NE

VAPOR PRESSURE (MMHg): 1 @ 20C

EVAPORATION RATE (BUTYL ACETATE=1): NE

VOLATILE ORGANIC COMPOUNDS-VOC (LESS EXEMPT): <20 G/L

-----10. STABILITY & REACTIVITY -----

STABLE:

YES

NO

HAZARDOUS POLYMERIZATION:

MAY OCCUR

MAY NOT OCCUR

INCOMPATIBLE MATERIALS:

POLYMERIZED BY WATER, ALCOHOL, AMINES, ALKALINE MATERIALS AND DIRECT UV LIGHT.

CONDITIONS TO AVOID:

AVOID TEMPERATURES ABOVE 176 F / 80 C, MOISTURE AND ALKALINES.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE/DIOXIDE AND OTHER TOXIC OR IRRITATING COMPOUNDS. OXIDES OF NITROGEN AND PROBABLY HYDROGEN CYANIDE ARE ALSO POSSIBLE DURING COMBUSTION.

-----11. TOXICOLOGICAL INFORMATION -----

ORAL LD50: >5000 MG/KG (ESTIMATED).

DERMAL LD50: >2000 MG/KG (ESTIMATED).

INHALATION LC50 NOTES:

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RECOMMENDED TWA: 0.2 PPM. VAPORS MAY BE IRRITATING.

-----12. ECOLOGICAL INFORMATION -----

NO KNOWN HAZARDS.

-----13. DISPOSAL CONSIDERATIONS -----

POLYMERIZE WITH WATER TO A SOLID MATERIAL. DISPOSE OF AS SOLID WASTE OR TRASH IN ACCORDANCE WITH LOCAL GOVERNMENT REGULATIONS OF THE REGION.

-----14. SHIPPING -----

DOT: NOT REGULATED

IATA: NOT REGULATED

IMDG: NOT REGULATED

-----15. REGULATORY INFORMATION -----

TSCA STATUS:

ALL INGREDIENTS IN THIS PRODUCT ARE LISTED, OR ARE EXEMPT, FOR THE TSCA INVENTORY LIST.

CALIFORNIA PROPOSITION 65:

NO CALIFORNIA PROPOSITION 65 CHEMICALS ARE KNOWN TO BE PRESENT, OR ARE INTENTIONALLY ADDED IN THE MANUFACTURE OF THIS PRODUCT.

OTHER:

EPCRA SECTION 313 SUPPLIER NOTIFICATION: HYDROQUINONE (<0.5%, CAS 123-31-9).

-----16. OTHER INFORMATION -----

ABBREVIATIONS USED IN THIS DOCUMENT:

NA = NOT APPLICABLE

NE = NOT ESTABLISHED

PREPARATION DATE: 11/07/12

REVISION NUMBER: 10

PREPARED BY: MARY ROBLES, REGULATORY AFFAIRS MANAGER

THE DATA CONTAINED HEREIN IS BASED UPON INFORMATION THAT PACER TECHNOLOGY BELIEVES TO BE RELIABLE. USERS OF THIS PRODUCT HAVE THE RESPONSIBILITY TO DETERMINE THE SUITABILITY OF USE AND TO ADOPT ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY AND PROTECTION OF PROPERTY AND PERSONS INVOLVED IN SAID

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BARNES DISTRIBUTION

USE. ALL STATEMENTS OR SUGGESTIONS ARE MADE WITHOUT WARRANTY, EXPRESS OR IMPLIED, REGARDING ACCURACY OF THE INFORMATION, THE HAZARDS CONNECTED WITH THE USE OF THE MATERIAL OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

DISCLAIMER:

ANY ALTERATION OF THIS DOCUMENT IS PROHIBITED AND VOIDS ANY WARRANTIES OFFERED BY PACER TECHNOLOGY

044412

MSDS

BARNES DISTRIBUTION

Synonyms: 21966
MATERIAL SAFETY DATA SHEET

MATERIAL NAME: RUGLYDE

PART NUMBERS:
RG-18, RG-18BK, RG-18CT, RG-18MY, RG-20, RG-20BK, RG-20MY, RG-55, RG-55BK,
RGC-18, RGC-20

-----SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION -----

MANUFACTURER INFORMATION:
AGS COMPANY
2651 HOYT STREET
MUSKEGON HEIGHTS, MI 49444

PHONE: 800-253-0403

FAX: 800-877-2858

EMERGENCY #: 800-255-3924 CHEM-TEL

-----SECTION 2 - HAZARDS IDENTIFICATION -----

EMERGENCY OVERVIEW: MAY CAUSE EYE, SKIN AND GASTROINTESTINAL TRACT IRRITATION.

POTENTIAL HEALTH EFFECTS:
EYES: MAY BE IRRITATING AND CAN CAUSE PAIN, TEARING, REDDENING AND SWELLING.

POTENTIAL HEALTH EFFECTS:

SKIN:
PROLONGED OR REPEATED CONTACT MAY RESULT IN IRRITATION AND/OR DERMATITIS.

POTENTIAL HEALTH EFFECTS:
INGESTION: THIS MATERIAL MAY BE HARMFUL OR FATAL IF SWALLOWED.

POTENTIAL HEALTH EFFECTS:
INHALATION: PROLONGED INHALATION MAY CAUSE IRRITATION.

HMS RATINGS:
HEALTH 0
FIRE 1
HMS REACTIVITY 0

HAZARD SCALE:
0 = MINIMAL
1 = SLIGHT
2 = MODERATE
3 = SERIOUS
4 = SEVERE

BARNES DISTRIBUTION

* = CHRONIC HAZARD

-----SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS -----

CAS #	COMPONENT	PERCENT
7732-18-5	WATER	72.48
8001-31-8	COCONUT OIL	11.03
1310-58-3	POTASSIUM HYDROXIDE	7.08
7789-12-0	SODIUM DICHROMATE, DIHYDRATE	6.93
2807-30-9	ETHYLENE GLYCOL MONOPROPYL ETHER	2.28
64742-65-0	PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC	0.16
102-71-6	TRIETHANOLAMINE	0.04

-----SECTION 4 - FIRST AID MEASURES -----

FIRST AID:

EYES:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER. GET MEDICAL ATTENTION, IF IRRITATION PERSISTS.

FIRST AID:

SKIN:

IMMEDIATELY FLUSH WITH PLENTY OF WATER. REMOVE CLOTHING. GET MEDICAL ATTENTION IMMEDIATELY. WASH CLOTHING SEPARATELY BEFORE REUSE.

FIRST AID:

INGESTION:

GET MEDICAL ATTENTION IMMEDIATELY. IF SWALLOWED, DO NOT INDUCE VOMITING. GIVE VICTIM A GLASS OF WATER OR MILK. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

FIRST AID:

INHALATION:

REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET IMMEDIATE MEDICAL ATTENTION.

-----SECTION 5 - FIRE FIGHTING MEASURES -----

GENERAL FIRE HAZARDS:

ORDER NO: 6302710 RELEASE NO: 001 MSDS NO: 047447

BARNES DISTRIBUTION

SEE SECTION 9 FOR FLAMMABILITY PROPERTIES.
NONE KNOWN

HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON, NITROGEN AND CHROMIUM

EXTINGUISHING MEDIA:
USE SUITABLE EXTINGUISHING MEDIA FOR SURROUNDING FIRE.

FIRE FIGHTING EQUIPMENT/INSTRUCTIONS:
FIREFIGHTERS SHOULD WEAR FULL PROTECTIVE GEAR.

NFPA RATINGS:
HEALTH 0
FIRE 1
REACTIVITY 0

HAZARD SCALE:
0 = MINIMAL
1 = SLIGHT
2 = MODERATE
3 = SERIOUS
4 = SEVERE

-----SECTION 6 - ACCIDENTAL RELEASE MEASURES -----

CONTAINMENT PROCEDURES: NO SPECIAL CONTAINMENT NEEDED.

CLEAN-UP PROCEDURES:
ABSORB WITH INERT MATERIAL AND PLACE IN A CHEMICAL WASTE CONTAINER.

EVACUATION PROCEDURES: ISOLATE AREA. KEEP UNNECESSARY PERSONNEL AWAY.

SPECIAL PROCEDURES: NONE

-----SECTION 7 - HANDLING AND STORAGE -----

HANDLING PROCEDURES: WASH THOROUGHLY AFTER HANDLING

STORAGE PROCEDURES: KEEP FROM FREEZING.

-----SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION -----

A:

COMPONENT EXPOSURE LIMITS:

POTASSIUM HYDROXIDE (1310-58-3):

ACGIH: 2 MG/M3

CEILING OSHA: 2 MG/M3

CEILING NIOSH: 2 MG/M3 CEILING

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TRIETHANOLAMINE (102-71-6):
ACGIH: 5 MG/M3 TWA

ENGINEERING CONTROLS: NONE NEEDED UNDER NORMAL PRODUCT USE CONDITIONS.

PERSONAL PROTECTIVE EQUIPMENT:

PERSONAL PROTECTIVE EQUIPMENT:
EYES/FACE: WEAR SAFETY GLASSES WITH SIDE SHIELDS OR GOGGLES.

PERSONAL PROTECTIVE EQUIPMENT:
SKIN: WHERE CONTACT IS LIKELY, WEAR CHEMICAL RESISTANT GLOVES.

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY:
IF AIRBORNE CONCENTRATIONS ARE ABOVE THE APPLICABLE EXPOSURE LIMITS, USE NIOSH APPROVED RESPIRATORY PROTECTION.

PERSONAL PROTECTIVE EQUIPMENT:
GENERAL: EYE WASH RECOMMENDED IN WORK AREA.

-----SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES -----

APPEARANCE: TEA COLORED

ODOR: ODORLESS

PHYSICAL STATE: LIQUID

PH: 9.6

VAPOR PRESSURE: ND

VAPOR DENSITY: HEAVIER THAN AIR

BOILING POINT: 212 DEG. F

MELTING POINT: ND

SOLUBILITY (H2O): COMPLETE

SPECIFIC GRAVITY: 1.01

FREEZING POINT: 32 DEG. F

EVAPORATION RATE: SLOWER THAN BUTYL ACETATE

VOC: ND

OCTANOL/H2O COEFF.: ND

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FLASH POINT: NA
FLASH POINT METHOD: NA

UPPER FLAMMABILITY LIMIT (UFL): NA
LOWER FLAMMABILITY LIMIT (LFL): NA

BURNING RATE: ND

AUTO IGNITION: ND

-----SECTION 10 - CHEMICAL STABILITY & REACTIVITY INFORMATION -----

CHEMICAL STABILITY: THIS IS A STABLE MATERIAL.

CHEMICAL STABILITY:
CONDITIONS TO AVOID: TEMPERATURES BELOW FREEZING

INCOMPATIBILITY: STRONG ACID OR ALKALI, OXIDIZERS AND AMINES.

HAZARDOUS DECOMPOSITION: OXIDES OF CARBON, NITROGEN AND CHROMIUM.

POSSIBILITY OF HAZARDOUS REACTIONS: WILL NOT OCCUR.

-----SECTION 11 - TOXICOLOGICAL INFORMATION -----

ACUTE DOSE EFFECTS:

A:
GENERAL PRODUCT INFORMATION: NO INFORMATION AVAILABLE FOR THE PRODUCT.

B:

COMPONENT ANALYSIS - LD50/LC50:

WATER (7732-18-5):
ORAL LD50 RAT: >90 ML/KG

COCONUT OIL (8001-31-8):
ORAL LD50 RAT: >5000 MG/KG

POTASSIUM HYDROXIDE (1310-58-3):
ORAL LD50 RAT: 214 MG/KG

ETHYLENE GLYCOL MONOPROPYL ETHER (2807-30-9):
ORAL LD50 RAT: 3089 MG/KG
DERMAL LD50 RABBIT: 960 (MICRO)L/KG

PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC (64742-65-0):
INHALATION LC50 RAT: 2.18 MG/L 4 H
ORAL LD50 RAT: >5000 MG/KG

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DERMAL LD50 RABBIT: >2000 MG/KG

TRIETHANOLAMINE (102-71-6):

ORAL LD50 RAT: 4190 MG/KG

DERMAL LD50 RABBIT: >2000 MG/KG

DERMAL LD50 RAT: >16 ML/KG

CARCINOGENICITY:

A:
GENERAL PRODUCT INFORMATION: NO INFORMATION AVAILABLE FOR THE PRODUCT.

B:

COMPONENT CARCINOGENICITY:

TRIETHANOLAMINE (102-71-6):

IARC: MONOGRAPH 77 [2000] (GROUP 3 (NOT CLASSIFIABLE))

-----SECTION 12 - ECOLOGICAL INFORMATION -----

ECOTOXICITY:

A:
GENERAL PRODUCT INFORMATION: NO INFORMATION AVAILABLE FOR THE PRODUCT.

B:

COMPONENT ANALYSIS - ECOTOXICITY - AQUATIC TOXICITY:

POTASSIUM HYDROXIDE (1310-58-3):

TEST & SPECIES

CONDITIONS

96 HR LC50 GAMBUSIA AFFINIS 80 MG/L [STATIC]

PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC (64742-65-0):

TEST & SPECIES

CONDITIONS

96 HR LC50 ONCORHYNCHUS MYKISS >5000 MG/L

48 HR EC50 DAPHNIA MAGNA >1000 MG/L

TRIETHANOLAMINE (102-71-6):

TEST & SPECIES

CONDITIONS

96 HR LC50 PIMEPHALES PROMELAS 10600-13000 MG/L [FLOW-THROUGH]

96 HR LC50 PIMEPHALES PROMELAS >1000 MG/L [STATIC]

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96 HR LC50 LEPOMIS MACROCHIRUS 450-1000 MG/L [STATIC]
72 HR EC50 DESMODESMUS 216 MG/L
SUBSPICATUS
96 HR EC50 DESMODESMUS 169 MG/L
SUBSPICATUS
24 HR EC50 DAPHNIA MAGNA 1386 MG/L

-----SECTION 13 - DISPOSAL CONSIDERATIONS -----

US EPA WASTE NUMBER & DESCRIPTIONS:

COMPONENT WASTE NUMBERS:

NO EPA WASTE NUMBERS ARE APPLICABLE FOR THIS PRODUCT'S COMPONENTS.

DISPOSAL INSTRUCTIONS:

ALL WASTES MUST BE HANDLED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

SEE SECTION 7 FOR HANDLING PROCEDURES. SEE SECTION 8 FOR PERSONAL PROTECTIVE EQUIPMENT RECOMMENDATIONS.

-----SECTION 14 - TRANSPORTATION INFORMATION -----

US DOT INFORMATION:

SHIPPING NAME: NOT REGULATED

-----SECTION 15 - REGULATORY INFORMATION -----

US FEDERAL REGULATIONS:

COMPONENT ANALYSIS:

THIS MATERIAL CONTAINS ONE OR MORE OF THE FOLLOWING CHEMICALS REQUIRED TO BE IDENTIFIED UNDER SARA SECTION 302 (40 CFR 355 APPENDIX A), SARA SECTION 313 (40 CFR 372.65) AND/OR CERCLA (40 CFR 302.4).

POTASSIUM HYDROXIDE (1310-58-3):

CERCLA:

1000 LB FINAL RQ

454 KG FINAL RQ

STATE REGULATIONS:

COMPONENT ANALYSIS - STATE:

THE FOLLOWING COMPONENTS APPEAR ON ONE OR MORE OF THE FOLLOWING STATE HAZARDOUS SUBSTANCES LISTS:

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COMPONENT	CAS	CA	MA	MN	NJ	PA	RI
POTASSIUM HYDROXIDE	1310-58-3	YES	YES	YES	YES	YES	YES
TRIETHANOLAMINE	102-71-6	NO	YES	YES	YES	YES	YES

COMPONENT ANALYSIS - WHMIS IDL: NO COMPONENTS ARE LISTED IN THE WHMIS IDL.

ADDITIONAL REGULATORY INFORMATION:

COMPONENT ANALYSIS - INVENTORY:

COMPONENT	CAS #	TSCA	CAN	EEC
WATER	7732-18-5	YES	DSL	EINECS
COCONUT OIL	8001-31-8	YES	DSL	EINECS
POTASSIUM HYDROXIDE	1310-58-3	YES	DSL	EINECS
SODIUM DICHROMATE, DIHYDRATE	7789-12-0	NO	NO	NO
ETHYLENE GLYCOL MONOPROPYL ETHER	2807-30-9	YES	DSL	EINECS
PETROLEUM DISTILLATES, SOLVENT DEWAXED HEAVY PARAFFINIC	64742-65-0	YES	DSL	EINECS
TRIETHANOLAMINE	102-71-6	YES	DSL	EINECS

-----SECTION 16 - OTHER INFORMATION -----

OTHER INFORMATION:

THE INFORMATION HEREIN IS PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE AS OF THE EFFECTIVE DATE GIVEN. HOWEVER, NO WARRANTY, EXPRESSED OR IMPLIED, IS GIVEN. IT IS THE BUYER'S RESPONSIBILITY TO ENSURE THAT ITS ACTIVITIES COMPLY WITH FEDERAL, STATE OR PROVINCIAL, AND LOCAL LAWS.

KEY/LEGEND:

EPA = ENVIRONMENTAL PROTECTION AGENCY
TSCA = TOXIC SUBSTANCE CONTROL ACT
ACGIH = AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
IARC = INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
NIOSH = NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH
NTP = NATIONAL TOXICOLOGY PROGRAM
OSHA = OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
NJTSR = NEW JERSEY TRADE SECRET REGISTRY.

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