#### **SAFETY DATA SHEET**

1. Identification

Product identifier Ei Ufm]hY

Other means of identification

Synonyms Construction Aggregate, Railroad Ballast, Rip Rap

Recommended use Quartzite aggregate may be used in the manufacture of bricks, mortar, cement,

concrete, plasters, paving materials, and other construction materials. Quartzite

aggregate may be distributed in bags, totes, and bulk shipments.

Recommended restrictions Not recommended as an abrasive blasting medium.

Manufacturer/Importer/Supplier/Distributor information

Company L.G. Everist, Inc.

Address PO Box 5829, 300 S Phillips Ave, Suite 200

Sioux Falls, SD 57117-5829

Telephone (605) 334-5000 Website www.lgeverist.com

For additional health, safety, or regulatory information and other emergency situations, cal 605-334-5000

2. Hazard(s) identification

Physical hazards Not classified.
Health Hazards Carcinogenicity

ealth Hazards Carcinogenicity Category 1A
Specific Target Organ Toxicity, Category 1

Repeated Exposure

OSHA defined hazards

Label elements



Signal word Danger

Hazard statement May cause cancer. May cause damage to organs (lung) through prolonged or repeated

exposure

**Precautionary statement** 

Prevention Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood. Wear protective gloves/protective clothing/eye

protection/face protection.

**Response** If exposed or concerned: Get medical advice/attention.

Storage Restrict or control access to stockpile areas. Engulfment hazard: To prevent burial or

suffocation, do not enter a confined space, such as a silo, bulk truck or other storage container or vessel that stores or contains aggregates without an effective procedure for

assuring safety.

Disposal Dispose of contents/container in accordance with local/regional/national/international

regulations.

Hazard(s) not otherwise None known.

classified (HNOC)

Supplemental information

Respirable Crystalline Silica (RCS) may cause cancer. Quartzite is a naturally occurring mineral complex that contains varying quantities of quartz (crystalline silica). In its natural bulk state, quartzite is not a known health hazard. Quartzite may be subjected to various natural or mechanical forces that produce small particles (dust) which may contain respirable crystalline silica (particles less than 10 micrometers in aerodynamic diameter). Repeated inhalation of respirable crystalline silica (quartz) may cause lung cancer according to IARC and NTP; ACGIH states that it is a suspected cause of cancer. Other forms of RCS (e.g., tridymite and cristobalite) may also be present or formed under certain industrial processes.

## 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	CAS number	"%	
Quartzite	None	> 99	
Crystalline Silica (Quartz)	14808-60-7	> 1	

#### 4. First-aid measures

Inhalation Quartztite dust: Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Quartzite dust: Wash off with soap and water. Get medical attention if irritation

develops and persists.

Eye contact Quartzite dust: Immediately flush with plenty of water for at least 15 minutes. Hold

eyelids apart. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Get medical attention if irritation develops or

persists.

Ingestion Quartzite dust: Rinse mouth and drink plenty of water. Never give anything by mouth

to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed

Inhaling dust may cause discomfort in the chest, shortness of breath, and coughing.

Prolonged inhalation may cause chronic health effects. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica liberated from this

product can cause silicosis, and may cause cancer.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under

observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Pre-existing medical conditions that may be aggravated by exposure include disorders of the eye, skin and lung (including asthma and other breathing disorders). If addicted to tobacco, smoking will impair the ability of the lungs to clear themselves of dust.

## 5. Fire-fighting measures

Suitable extinguishing media Quartzite is not flammable. Use fire-extinguishing media appropriate for surrounding

materials.

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

No unusual fire or explosion hazards noted. Not a combustible dust.

Special protective equipment and

Use protective equipment appropriate for surrounding materials.

precautions for firefighters

Fire fighting equipment/instructions No specific precautions.

Specific methods

Contact with powerful oxidizing agents may cause fire and/or explosions (see

section 10 of SDS).

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, and emergency procedures Methods and materials for containment and cleaning up Wear appropriate protective equipment and clothing during clean-up of materials that contain or may liberate sand and gravel dust.

Spilled material, where dust is generated, may overexpose cleanup personnel to respirable crystalline silica-containing dust. Do not dry sweep or use compressed air for clean-up. Wetting of spilled material and/or use of respiratory protective equipment may be necessary.

**Environmental precautions** Avoid discharge of fine particulate matter into drains or water courses.

7. Handling and storage

Precautions for safe handling Do not handle until all safety precautions have been read and understood. Keep

formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment.

Observe good industrial hygiene practices.

**Conditions for safe storage,** Avoid dust formation or accumulation.

### 8. Exposure controls/personal protection

Occupational exposure limits 1 – Value equivalent to OSHA formulas (29 CFR 1910.1000; 29 CFR 1917; 29 CFR 1918).

Type

- 2 Value also applies to MSHA Metal / Non-Metal (1973 TLVs at 30 CFR 56/57.5001).
- 3 OSHA enforces 0.250 mg/m<sup>3</sup> in construction and shipyards (CPL-03-00-007).
- 4 Value also applies to OSHA construction (29 CFR 1926.55 Appendix A) and shipyards (29 CFR 1915.1000, Table Z).

Value

Form

**Form** 

Respirable dust

5 - MSHA limit = 10 mg/m<sup>3</sup>.

#### U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

o inponente	. , , , ,		
Particulates not otherwise classified	PEL	5 mg/m³	Respirable fraction
CAS SEQ250)		15 mg/m³	Total dust (4)
JS. OSHA Table Z-3 (29 CFR 1910.1000)			
Components	Туре	Value	Form
Crystalline Silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m³	Total dust (1,2)
		0.1 mg/m³	Respirable (1,2,3)
ridymite and Cristobalite (other forms of crystalline	TWA	0.15 mg/m³	Total dust (1)
ilica) (CAS Mixture)		0.05 mg/m³	Respirable (1,2)
Particulates not otherwise classified	TWA	5 mg/m³	Respirable fraction (1)
CAS SEQ250)		15 mg/m³	Total dust (1,4,5)
IS. ACGIH Threshold Limit Values®			
Components	Туре	Value	Form
rystalline Silica (all forms; CAS mixture)	TWA	0.025 mg/m³	Respirable fraction
	TWA	3 mg/m³	Respirable particles (2)
Particulates not otherwise classified	1 4 4 / 1		

# Biological limit values

Crystalline Silica (all forms; CAS mixture)

Components

Components

No biological exposure limits noted for the ingredient(s).

Type

**TWA** 

#### **Exposure guidelines**

OSHA PELs, MSHA PELs, and ACGIH TLVs are 8-hr TWA values. NIOSH RELs are for TWA exposures up to 10-hr/day and 40-hr/wk. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Terms including "Particulates Not Otherwise Classified," "Particulates Not Otherwise Regulated," "Particulates Not Otherwise Specified," and "Inert or Nuisance Dust" are often used interchangeably; however, the user should review each agency's terminology for differences

Value

0.05 mg/m<sup>3</sup>

## in meanings.

#### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour indoors) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

Skin protection

Hand protectionUse personal protective equipment as required.OtherUse personal protective equipment as required.

**Respiratory protection** When handling or performing work with quartzite that produces dust or respirable

crystalline silica in excess of applicable exposure limits, wear a NIOSH-approved respirator that is properly fitted and is in good condition. Respirators must be used in accordance with

all applicable workplace regulations.

Thermal hazards Not anticipated. Wear appropriate thermal protective clothing, when necessary.

#### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance** 

Physical state Solid.

Form Solid, particles.

Color Pink, Dark Purple

Odor Not applicable.
Odor threshold Not applicable.

PH Not applicable.

Melting point/freezing point Not applicable.

Initial boiling point and boiling Not applicable.

range

Flash point Non-combustible
Evaporation rate Not applicable.
Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit – lower (%)
Flammability limit – upper (%)

Vapor pressure

Vapor density

Relative density

Not applicable.

Not applicable.

Not applicable.

2.6 - 2.8

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature Not applicable.

Viscosity Not applicable.

Other information

Explosive properties Not applicable.

Flammability Not applicable.

## 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and

transport.

Chemical stability Material is stable under normal conditions.

**Possibility of hazardous reactions** No dangerous reaction known under conditions of normal use.

# 11. Toxicological information

# Information on likely routes of exposure

Inhalation Repeated inhalation of respirable crystalline silica (quartz) may cause silicosis, a fibrosis

(scarring) of the lungs. Silicosis is irreversible and may be fatal. Silicosis increases the risk of contracting pulmonary tuberculosis. Some studies suggest that repeated

inhalation of respirable crystalline silica may cause other adverse health effects including

lung and kidney cancer.

**Skin contact**Quartzite dust: May cause irritation through mechanical abrasion. **Eye contact**Quartzite dust: May cause irritation through mechanical abrasion.

Ingestion Not likely, due to the form of the product. However, accidental ingestion of the content

may cause discomfort.

Symptoms related to the physical, chemical and toxicological characteristics

Quartzite dust: Discomfort in the chest. Shortness of breath. Coughing.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Skin corrosion/irritation This product is not expected to be a skin hazard. Serious eye damage/eye irritation

Respiratory or skin sensitization

Direct contact with eyes may cause temporary irritation.

Respiratory sensitization No respiratory sensitizing effects known. Not known to be a dermal irritant or sensitizer. Skin sensitization

Germ cell mutagenicity No data available to indicate product or any components present at greater than

0.1% are mutagenic or genotoxic.

Respirable crystalline silica has been classified by IARC and NTP as a known human Carcinogenicity

carcinogen, and classified by ACGIH as a suspected human carcinogen.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline Silica (Quartz) (CAS 14808-60-7) 1 Carcinogenic to humans. Respirable Tridymite and Cristobalite 1 Carcinogenic to humans.

(other forms of Crystalline) (CAS Mixture)

## NTP Report on Carcinogens

Crystalline Silica(Quartz) (CAS 14808-60-7) Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Not expected to be a reproductive hazard. Reproductive toxicity

Specific target organ toxicity

single exposure

Not classified.

Specific target organ toxicity – Respirable crystalline silica: May cause damage to organs (lung) through

repeated exposure prolonged or repeated exposure.

Due to the physical form of the product it is not an aspiration hazard. Aspiration hazard

Chronic effects Prolonged inhalation of respirable crystalline silica may be harmful. May cause damage to

organs (lungs) through prolonged or repeated exposure. There are reports in the literature suggesting that excessive crystalline silica exposure may be associated with autoimmune disorders and other adverse health effects involving the kidney. In particular, the incidence of scleroderma (thickening of the skin caused by swelling and thickening of fibrous tissue) appears to be higher in silicotic individuals. To date, the evidence does not conclusively determine a causal relationship between silica exposure and these adverse health effects.

## 12. Ecological information

Not expected to be harmful to aquatic organisms. Discharging sand and gravel dust and **Ecotoxicity** 

fines into waters may increase total suspended particulate (TSP) levels that can be

harmful to certain aquatic organisms.

Persistence and degradability Not applicable. Bioaccumulative potential Not applicable. Not applicable. Mobility in soil

No other adverse environmental effects (e.g., ozone depletion, photochemical ozone Other adverse effects

creation potential, global warming potential) are expected from this component.

13. Disposal considerations

**Disposal instructions** Do not allow fine particulate matter to drain into sewers/water supplies. Do not contaminate

ponds, waterways or ditches with fine particulates. Dispose of contents in accordance with

local/regional/national/international regulations.

Hazardous waste code Not regulated.

Waste from residues / Dispose of in accordance with local regulations. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after

container is emptied. Empty packaging materials should be recycled or disposed of in

accordance with applicable regulations and practices.

# 14. Transport information

unused products

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

#### **IMDG**

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

## 15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Yes

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

(SDWA)

Not regulated.

**US state regulations** 

US. Massachusetts RTK - Substance List

Crystalline Silica (Quartz) (CAS 14808-60-7)

Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)

US. New Jersey Worker and Community Right-to-Know Act

Crystalline Silica (Quartz) (CAS 14808-60-7)

Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)

US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline Silica (Quartz) (CAS 14808-60-7)

Respirable Tridymite and Cristobalite (other forms of crystalline silica) (CAS Mixture)

**US. Rhode Island RTK** 

Not regulated.

**US.** California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Crystalline Silica (Quartz) (CAS 14808-60-7)

**International Inventories** 

Country(s) or region Inventory name On inventory (yes/no)\*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

 Issue date
 11/03/15

 Revision date
 11/03/15

 Version #
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**Disclaimer** The information contained in this document applies to this specific material as supplied and L.G.

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