



# Aggregate Products

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 06/26/2015

Supersedes: 04/07/2007

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Aggregate Products  
Other means of identification : Sand  
Gravel

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Fine aggregate for concrete.

#### 1.3. Details of the supplier of the safety data sheet

E.R Jahna Industries, Inc  
202 East Stuart Ave.  
Mailing PO Drawer  
Lake Wales, FL 33853  
T (863)-676-9431  
www.Jahna.com

Contact Name: Dwight Graves  
Safety Officer

#### 1.4. Emergency telephone number

Emergency number : (863) 676-9431  
M-F 8am- 5pm Eastern Time  
Dwight Graves 24-Hour contact number (863) 557-3043

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Eye Irrit. 2A H319  
Carc. 1A H350  
STOT SE 3 H335  
STOT RE 1 H372

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H350 - May cause cancer (oral, Inhalation, Dermal)  
H372 - Causes damage to organs (lung/respiratory system) through prolonged or repeated exposure (Dermal, Inhalation, oral)

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P260 - Do not breathe dust  
P264 - Wash hands, face, clothing thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear protective clothing  
P304 + P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308 + P313 - If exposed or concerned: Get medical advice/attention  
P312 - Call a doctor if you feel unwell  
P337+P313 - If eye irritation persists: Get medical advice/attention  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up  
P501 - Dispose of contents/container to comply with local/regional/national/international regulations

# Aggregate Products

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS-US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Quartz (Crystalline Silica)	(CAS No) 14808-60-7	95 - 100	Eye Irrit. 2A, H319 Carc. 1A, H350 STOT SE 3, H335 STOT RE 2, H373
Cristobalite	(CAS No) 14464-46-1	0 - 5	Carc. 1A, H350 STOT RE 1, H372

Full text of H-phrases: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- First-aid measures after inhalation : Immediate effects are not anticipated. If large amounts of dusts are inhaled, remove to fresh air. If breathing problems occur, a certified professional should administer oxygen or CPR if indicated. Seek immediate medical attention.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Immediately flush with large amounts of water, holding eyelids open, for at least 20 minutes. Repeat if necessary. Remove contact lenses, if present and easy to do. Seek medical assistance if irritation persists.
- First-aid measures after ingestion : Not expected to be an important route of entry into the body. If large amounts of particulate matter are ingested, it may cause gastrointestinal distress. Seek medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : There are potential chronic health effects to consider.
- Symptoms/injuries after inhalation : May cause cancer by inhalation. Long-term dust exposure may aggravate pre-existing respiratory disease. Persons who develop silicosis have greatly increased risks of developing tuberculosis and workers who are exposed to crystalline silica and smoke have increased risks of lung damage.
- Symptoms/injuries after skin contact : Direct contact may cause irritation, or dry skin. Rubbing may intensify symptoms and create abrasions.
- Symptoms/injuries after eye contact : Particulate matter may scratch the cornea or cause other mechanical injury to the eye. Scratching or physical damage to the eyes can cause irritation, redness, pain, tear formation, blurred vision, and light sensitivity.
- Symptoms/injuries after ingestion : Practically non-toxic. Ingestion is not anticipated under normal working conditions.
- Chronic symptoms : Repeated inhalation of respirable crystalline silica over a number of years can cause lung disease (silicosis) and increase the risks of developing respiratory cancer. Silicosis is a progressive fibrotic pneumoconiosis which greatly decreases the ability of the lungs to provide oxygen (decreased pulmonary capacity). The disease may progress even if the worker is removed from exposure. The extent and severity of lung injury depends on a variety of factors including particle size, percentage of silica, natural resistance, dust concentration and length of exposure. Symptoms of silicosis include phlegm, coughing, and characteristic x-rays.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Any. Use media appropriate for surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable.
- Reactivity : Stable under normal conditions of use.

# Aggregate Products

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.3. Advice for firefighters

Protection during firefighting : Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Ensure adequate air ventilation.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stay upwind. Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Do not touch or walk through spilled material.

Methods for cleaning up : For small spills, clean with a vacuum with a filtration system sufficient to remove and prevent recirculation of crystalline silica (a vacuum equipped with a high-efficiency particulate air (HEPA) filter is recommended). For large spills, use a fine spray or mist to control dust creation and carefully scoop or shovel into clean dry container for later reuse or disposal. DO NOT USE DRY SWEEPING OR COMPRESSED AIR TO CLEAN SPILLS. Pick up product and return to original packaging if reusable. If not reusable, place in appropriate containers for disposal. Any wastes generated during clean-up operations should be evaluated with respect to hazardous and solid waste regulations and disposed of in a properly permitted facility in accordance with all local, state, and federal regulations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Product is stable and no special storage procedures are needed. Material containing crystalline silica should be kept from contact with hydrofluoric acid.

Hygiene measures : Practice good housekeeping. Wash thoroughly after handling. Change contaminated clothing. Do not reuse until laundered. Do not take silica contaminated clothing home.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Dust and/or particulates matter that may be generated during handling or processing should be cleaned up by vacuuming or wet mopping. Store in dry area in closed containers. Storage and work areas should be periodically cleaned to minimize dust accumulation.

### 7.3. Specific end use(s)

Use of the substance/mixture : Fine aggregate for concrete.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Quartz (Crystalline Silica) (14808-60-7)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> A2
ACGIH	Remark (ACGIH)	Lung Cancer; Silicosis
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> %SiO <sub>2</sub> +2
OSHA	OSHA PEL (TWA) (ppm)	250 mppcf %SiO <sub>2</sub> +2
OSHA	Remark (US OSHA)	(3) See Table Z-3.

Cristobalite (14464-46-1)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	0.025 mg/m <sup>3</sup> A2
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	>= 5 mg/m <sup>3</sup> /(%SiO <sub>2</sub> + 2) Resp
OSHA	Remark (US OSHA)	(3) See Table Z-3.

# Aggregate Products

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 8.2. Exposure controls

Appropriate engineering controls	: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Enclosed processes used in combination with local exhaust ventilation as necessary to control air contaminants at or below acceptable exposure guidelines. Collection systems must be designed and maintained to prevent the accumulation and recirculation of respirable silica into the workplace. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Personal protective equipment	: An Appropriate apron or other body covering, see above, is recommended where there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.
Hand protection	: Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. The equipment must be cleaned thoroughly after each use with soap & water.
Eye protection	: Where eye contact is possible with particulate matter, safety glasses with side shields are recommended.
Skin and body protection	: Under dusty conditions or when excessive skin contact is likely, wear coveralls or other suitable work clothing.
Respiratory protection	: Wear NIOSH/MSHA approved respirator equipped with particulate cartridges when dusty in poorly ventilated areas, and if exposure limits are exceeded. A respiratory program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Grayish white to tan solid with particles size ranging from fine dust +200 to 4 standard sieve size.
Color	: White to grayish in color.;Tan
Odor	: Odourless.
Odor threshold	: No data available
pH	: 5 - 7
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 2.4-2.9
Solubility	: Insoluble.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions of use.

### 10.2. Chemical stability

Product is stable.

# Aggregate Products

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Avoid contact with hydrofluoric acid (HF).

### 10.5. Incompatible materials

Silica-Containing materials are dissolved by HF.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### Cristobalite (14464-46-1)

Additional information	LDLo Rat - 200 mg/kg - Lungs, thorax, or respiration: "Fibrosis focal (pneumoconiosis)" Acute silicosis has been reported for exposure to extremely high crystalline silica exposures particularly when the particle size of the dust is very small. Acute silicosis is rapidly progressive with diffuse pulmonary involvement. The disease is often complicated by tuberculosis and can develop several months after the initial exposure with the possibility of death within 1 or 2 years.
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Skin corrosion/irritation : Not classified  
pH: 5 - 7

Serious eye damage/irritation : Causes serious eye irritation.  
pH: 5 - 7

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer (oral, Inhalation, Dermal).

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

IARC group	1 - Carcinogenic to humans
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#### Cristobalite (14464-46-1)

IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : Causes damage to organs (lung/respiratory system) through prolonged or repeated exposure (Dermal, Inhalation, oral).

Aspiration hazard : Not classified

Symptoms/injuries : There are potential chronic health effects to consider.

Symptoms/injuries after inhalation : May cause cancer by inhalation. Long-term dust exposure may aggravate pre-existing respiratory disease. Persons who develop silicosis have greatly increased risks of developing tuberculosis and workers who are exposed to crystalline silica and smoke have increased risks of lung damage.

Symptoms/injuries after skin contact : Direct contact may cause irritation, or dry skin. Rubbing may intensify symptoms and create abrasions.

Symptoms/injuries after eye contact : Particulate matter may scratch the cornea or cause other mechanical injury to the eye. Scratching or physical damage to the eyes can cause irritation, redness, pain, tear formation, blurred vision, and light sensitivity.  
Practically non-toxic. Ingestion is not anticipated under normal working conditions.

Chronic symptoms : Repeated inhalation of respirable crystalline silica over a number of years can cause lung disease (silicosis) and increase the risks of developing respiratory cancer. Silicosis is a progressive fibrotic pneumoconiosis which greatly decreases the ability of the lungs to provide oxygen (decreased pulmonary capacity). The disease may progress even if the worker is removed from exposure. The extent and severity of lung injury depends on a variety of factors including particle size, percentage of silica, natural resistance, dust concentration and length of exposure. Symptoms of silicosis include phlegm, coughing, and characteristic x-rays.

# Aggregate Products

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Waste treatment methods : Must be in accordance with EPA or state regulations under the authority of the Resource Conservation and Waste Recovery Act.
- Waste disposal recommendations : It may be disposed of as a common waste in an approved landfill. All wastes should be evaluated in conjunction with applicable solid and hazardous waste regulations, Toxicity Characteristic Leaching Procedures (TCLP), and disposed of as appropriate. Follow applicable Federal, state and local regulations.
- Additional information : Empty containers will contain product residues. Observe proper safety and handling precautions. Do not allow empty containers to be used for any purpose except to store and ship original product.

### SECTION 14: Transport information

In accordance with DOT  
Not regulated for transport

#### Additional information

Other information : No supplementary information available.

#### ADR

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Aggregate Products

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

##### Crystalline Silica (14808-60-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

##### Cristobalite (14464-46-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

##### CANADA

##### Aggregate Products

WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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#### EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

# Aggregate Products

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 15.2.2. National regulations

#### Crystalline Silica (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

### 15.3. US State regulations

#### Crystalline Silica (14808-60-7)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	

#### Crystalline Silica (14808-60-7)

U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Washington - Permissible Exposure Limits - TWAs

#### Cristobalite (14464-46-1)

U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations  
U.S. - New Jersey - Right to Know Hazardous Substance List

## SECTION 16: Other information

Revision date : 07/1/2015  
Data sources : ChemADVISOR, Inc.[<https://www.chemadvisor.com>]. GESTIS DNEL Database [[http://dnel-en.itrust.de/nxt/gateway.dll/dnel\\_en/000000.xml?f=templates\\$fn=default.htm\\$vid=dneleng:ddbeng\\$3.0/](http://dnel-en.itrust.de/nxt/gateway.dll/dnel_en/000000.xml?f=templates$fn=default.htm$vid=dneleng:ddbeng$3.0/)].

Full text of H-phrases:

Carc. 1A	Carcinogenicity Category 1A
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard

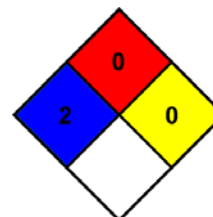
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard- Temporary or minor injury may occur  
\* Chronic Hazard - Chronic (long-term) health effects may result from repeated overexposure

Flammability

: 0 Minimal Hazard

Physical

: 0 Minimal Hazard

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*