Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Revision Date: 09/21/2015 Date of issue: 09/21/2015 Supersedes Date: 04/11/2007 Version: 1.0

#### **SECTION 1: IDENTIFICATION**

## 1.1. Product Identifier

**Product Form:** Mixture **Product Name:** Aggregate

Synonyms: Sand. Gravel. Stone. Limestone. Dolomite.

**1.2.** Intended Use of the Product Construction and Farming Industry

## 1.3. Name, Address, and Telephone of the Responsible Party

## Company

**Douds Stone LLC** 

14242 Terminal Avenue

P. O. Box 717

Ottumwa, IA 52501

641.683.1671

## 1.4. Emergency Telephone Number

**Emergency Number**: 641.683.1671

## **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the Substance or Mixture

## **Classification (GHS-US)**

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)





**Hazard Statements (GHS-US)** : H335 - May cause respiratory irritation.

H350 - May cause cancer.

H372 - Causes damage to organs through prolonged or repeated exposure.

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 vapors, mist, or spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

 $\ensuremath{\mathsf{P270}}$  -  $\ensuremath{\mathsf{Do}}$  not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

 $\ensuremath{\mathsf{P280}}$  - Wear protective gloves, protective clothing, and eye protection.

P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position

comfortable for breathing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice/attention if you feel unwell.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national,

and international regulations.

#### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Dust may cause mechanical irritation to eyes, nose, throat, and lungs. Product particle size ranges from fine dust to boulders, and may contain up to 100% Quartz/Crystalline Silica. Wear appropriate personal protective equipment if dust is generated under normal conditions of use.

#### 2.4. Unknown Acute Toxicity (GHS-

#### US)

No data available

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Quartz	(CAS No) 14808-60-7	<= 100	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1,
Silica, cristobalite	(CAS No) 14464-46-1	<= 100	Carc. 1A, H350 STOT RE 1,
Limestone	(CAS No) 1317-65-3	<= 100	Not classified
Dolomite (CaMg(CO3)2)	(CAS No) 16389-88-1	<= 100	Not classified
Particulates not otherwise classified (PNOC)	(CAS No) Various	<= 100	Not classified

Full text of H-phrases: see section 16

## **SECTION 4: FIRST AID MEASURES**

### 4.1. Description of First Aid Measures

**First-aid Measures General**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation**: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact**: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

**First-aid Measures After Eye Contact**: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

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

**Symptoms/Injuries:** May cause respiratory irritation. May cause cancer. Causes damage to organs (lung/respiratory system) through prolonged or repeated exposure (Inhalation).

**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause mechanical skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause mechanical eye irritation.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects. May cause gastrointestinal irritation.

**Chronic Symptoms:** May cause cancer. Causes damage to organs (lung/respiratory system) through prolonged or repeated exposure (Inhalation).

## 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

### **SECTION 5: FIRE-FIGHTING MEASURES**

#### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Does not burn. Use extinguishing media appropriate for surrounding fire. Water spray, dry chemical, foam, carbon dioxide (CO<sub>2</sub>).

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions. Aggregate dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

## 5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

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<sup>\*</sup> The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

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**Firefighting Instructions:** Will not sustain combustion. Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures**: Do not generate dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood.

#### 6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### **6.1.2. For Emergency Responders**

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain and collect as any solid. Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Do not generate dust.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Vacuum must be fitted with HEPA filter to prevent release of particulates during clean-up. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

#### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

#### **SECTION 7: HANDLING AND STORAGE**

## 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not breathe dust. Avoid contact with eyes, skin and clothing. Do not handle until all safety precautions have been read and understood. Use appropriate personal protection equipment (PPE).

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Do not generate dust. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures and incompatible materials.

**Incompatible Products:** Strong acids. Strong bases. Aggregate dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

7.3. Specific End Use(s) No additional information available

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Quartz (14808-60-7)			
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (respirable fraction)	
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³ (respirable dust)	
USA IDLH	US IDLH (mg/m <sup>3</sup> )	50 mg/m³ (respirable dust)	
USA OSHA	OSHA PEL (STEL) (mg/m³)	250 mppcf/%SiO <sub>2</sub> +5, 10mg/m <sup>3</sup> /%SiO <sub>2</sub> +2	
Silica, cristob	Silica, cristobalite (14464-46-1)		
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m <sup>3</sup> (respirable fraction)	
USA ACGIH	ACGIH chemical category	Suspected Human Carcinogen	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³ (respirable dust)	

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USA IDLH	US IDLH (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup> (respirable dust)
Limestone (1	317-65-3)	
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m³)	10 mg/m <sup>3</sup> (total dust)
		5 mg/m <sup>3</sup> (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)
		5 mg/m³ (respirable fraction)
Particulates	not otherwise classified (PNOC) (RR-00072-6)	
USA ACGIH	ACGIH TWA (mg/m³)	3 mg/m <sup>3</sup> Respirable fraction
		10 mg/m³ Total Dust
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m <sup>3</sup> Respirable fraction
		15 mg/m <sup>3</sup> Total Dust

## 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. Ensure adequate ventilation, especially in confined areas. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Avoid creating or spreading dust. Ensure all national/local regulations are observed.

## **Personal Protective Equipment**

: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.









**Materials for Protective Clothing** 

Hand Protection Eye Protection

Skin and Body Protection
Respiratory Protection

: Dust and chemically resistant materials and fabrics.

: Wear protective gloves.

: In case of dust production: protective goggles. : In case of dust production: dustproof clothing.

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information

: When using, do not eat, drink or smoke.

## **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 particle size ranging from fine dust to

boulders

Odor : None

**Odor Threshold** : No data available : No data available Ηq **Evaporation Rate** : No data available **Melting Point** : No data available : No data available **Freezing Point Boiling Point** : No data available **Flash Point** : No data available **Auto-ignition Temperature** : No data available : No data available **Decomposition Temperature** : No data available Flammability (solid, gas) **Vapor Pressure** : No data available Relative Vapor Density at 20 °C : No data available **Relative Density** : No data available

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Specific Gravity : 2.4 - 2.9

Solubility: Insoluble in water.Partition Coefficient: N-Octanol/Water: No data availableViscosity: No data available

**9.2.** Other Information No additional information available

## **SECTION 10: STABILITY AND REACTIVITY**

- **10.1. Reactivity:** Hazardous reactions will not occur under normal conditions. Aggregate dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.
- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
  - 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
  - 10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.
- **10.5. Incompatible Materials:** Strong acids. Strong bases. Aggregate dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.
- 10.6. Hazardous Decomposition Products: Silica compounds. Oxides of calcium. Oxides of magnesium.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg

Skin Corrosion/Irritation: Not classified Serious

Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

**Germ Cell Mutagenicity:** Not classified **Carcinogenicity:** May cause cancer.

Quartz (14808-60-7)	
IARC group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List In OSHA Hazard Communication Carcinogen list.	
Silica, cristobalite (14464-46-1)	
IARC group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Not classified

**Symptoms/Injuries After Inhalation:** Irritation of the respiratory tract and the other mucous membranes. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause mechanical skin irritation.

Symptoms/Injuries After Eye Contact: May cause mechanical eye irritation.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects. May cause gastrointestinal irritation.

**Chronic Symptoms:** May cause cancer. Causes damage to organs (lung/respiratory system) through prolonged or repeated exposure (Inhalation).

## **SECTION 12: ECOLOGICAL INFORMATION**

#### 12.1. Toxicity

**Ecology - General** : Not classified.

## 12.2. Persistence and Degradability

Aggregate	
Persistence and Degradability	Not established.

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#### 12.3. Bioaccumulative Potential

Aggregate	
Bioaccumulative Potential	Not established.
Dolomite (CaMg(CO3)2) (16389-88-1)	
BCF fish 1	(no known bioaccumulation)

12.4. Mobility in Soil No additional information available

## 12.5. Other Adverse Effects

Other Information

: Avoid release to the environment.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment.

## **SECTION 14: TRANSPORT INFORMATION**

14.1. In Accordance with DOT
14.2. In Accordance with IMDG
14.3. In Accordance with IATA
Not regulated for transport
Not regulated for transport

## **SECTION 15: REGULATORY INFORMATION**

## 15.1 US Federal Regulations

Aggregate		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
	Delayed (chronic) health hazard	
Quartz (14808-60-7)		
Listed on the United States TSCA (Toxic Substance	es Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
	Delayed (chronic) health hazard	
Silica, cristobalite (14464-46-1)	·	
Listed on the United States TSCA (Toxic Substance	es Control Act) inventory	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard	
Limestone (1317-65-3)	·	
Listed on the United States TSCA (Toxic Substance	tes Control Act) inventory	
Dolomite (CaMg(CO3)2) (16389-88-1)		
Listed on the United States TSCA (Toxic Substance	ces Control Act) inventory	

## 15.2 US State Regulations

Quartz (14808-60-7)		
U.S California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the	
	State of California to cause cancer.	
Quartz (14808-60-7)		
U.S Massachusetts - Right To Know List		
U.S New Jersey - Right to Know Hazardous Substance	2	
List U.S Pennsylvania - RTK (Right to Know) List		
Silica, cristobalite (14464-46-1)		
U.S Massachusetts - Right To Know List		
U.S New Jersey - Right to Know Hazardous Substance	5	
List U.S Pennsylvania - RTK (Right to Know) List		
Limestone (1317-65-3)		
U.S Massachusetts - Right To Know List		
U.S New Jersey - Right to Know Hazardous Substance	2	

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 09/21/2015

List U.S. - Pennsylvania - RTK (Right to Know) List

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: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

## **GHS Full Text Phrases**:

Carc. 1A	Carcinogenicity Category 1A	
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1	
STOT SE 3	Specific target organ toxicity (single exposure) Category 3	
H335	May cause respiratory irritation	
H350	May cause cancer	
H372	Causes damage to organs through prolonged or repeated exposure	

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.

SDS US (GHS HazCom)

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