

## Material Safety Data Sheet

# SAFEVERT VISCOSIFIER

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		1
PERSONAL PROTECTION	E	

### 1. Product and Company Identification

**Material name**                         **SAFEVERT VISCOSIFIER**  
**Version #**                                 03  
**Issue date**                               September-24-2012  
**Revision date**                           September-24-2012  
**Supersedes date**                       February-28-2011  
**CAS #**                                       Mixture  
**Product use**                              Rheological Additive  
**Manufacturer information**           INTEGRITY INDUSTRIES INC.  
   2710 E. Corral Ave.  
   Kingsville, Texas 78363 United States  
   Main: 361-595-5561

**Supplier information**                   INTEGRITY INDUSTRIES INC.  
   2710 E. Corral Ave.  
   Kingsville, TX 78363

**Supplier emergency telephone number(s)**   CHEMTREC 1-800-424-9300

### 2. Hazards Identification

**Emergency overview**                   WARNING  
  
 AVOID CREATING DUST. Harmful by inhalation. May cause eye irritation. May cause skin irritation. Cancer hazard. This product contains crystalline silica that may cause silicosis and cancer. Prolonged exposure may cause chronic effects. Product may form explosive dust/air mixtures if high concentration of product dust is suspended in air.

**OSHA regulatory status**               This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

**Potential health effects**

**Routes of exposure**                   Inhalation. Ingestion. Eye contact. Skin contact.

**Eyes**                                       Dust or powder may irritate eye tissue. Rubbing may cause abrasion of cornea. Avoid contact with eyes.

**Skin**                                       Prolonged exposure may cause drying or cracking of the skin and possible irritation. Avoid contact with the skin.

**Inhalation**                               Harmful by inhalation. Inhalation of dusts may cause respiratory irritation. Do not breathe dust. This product contains crystalline silica that may cause silicosis and cancer.

**Ingestion**                               Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause delayed lung damage. Do not ingest.

---

<b>Target organs</b>	Eyes. Lungs. Respiratory system. Skin.
<b>Chronic effects</b>	Shortness of breath. Conjunctiva. May cause delayed lung damage. This product has the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica. Overexposure to dust may result in pneumoconiosis, a respiratory disease caused by inhalation of mineral dust, which can lead to fibrotic changes to the lung tissue, or silicosis, a respiratory disease caused by inhalation of silica dust, which can lead to inflammation and fibrosis of the lung tissue. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.
<b>Signs and symptoms</b>	Discomfort in the chest. Shortness of breath. Corneal damage. Cough. Conjunctivitis.
<b>Potential environmental effects</b>	Ecological injuries are not known or expected under normal use.

### 3. Composition / Information on Ingredients

Components	CAS #	Percent
Crystalline Silica in the form of Quartz	14808-60-7	2.5 - 10

### 4. First Aid Measures

#### First aid procedures

<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
<b>Skin contact</b>	Wash off with soap and plenty of water.
<b>Inhalation</b>	Move to fresh air. Oxygen or artificial respiration if needed. Call a physician if symptoms develop or persist.
<b>Ingestion</b>	Do not induce vomiting without medical advice. Have victim rinse mouth thoroughly with water. If ingestion of a large amount does occur, seek medical attention.

**Notes to physician** In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**General advice** In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Get medical attention if symptoms occur. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire Fighting Measures

**Flammable properties** Dust accumulation from this product may present an explosion hazard in the presence of an ignition source.

#### Extinguishing media

<b>Suitable extinguishing media</b>	Dry chemical, foam, carbon dioxide, water fog.
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.

#### Protection of firefighters

**Protective equipment and precautions for firefighters** Structural firefighters protective clothing will only provide limited protection.

**Fire fighting equipment/instructions**

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Move containers from fire area if you can do it without risk. Do not scatter spilled material with high pressure water streams. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

**Specific methods**

Use water spray to cool unopened containers.

**6. Accidental Release Measures**

**Personal precautions**

Use personal protective equipment. Wear a dust mask if dust is generated above exposure limits. Ensure adequate ventilation. Avoid inhalation of dust from the spilled material. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**Methods for containment**

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewers, basements or confined areas. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product.

**Methods for cleaning up**

Avoid dust formation. Sweep up or gather material and place in appropriate container for disposal. After removal flush contaminated area thoroughly with water. Small Dry Spills: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Collect dust or particulates using a vacuum cleaner with a HEPA filter.

**Other information**

Clean up in accordance with all applicable regulations.

**7. Handling and Storage**

**Handling**

Do not handle or store near an open flame, heat or other sources of ignition. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment. Wear personal protective equipment. Wash thoroughly after handling. Avoid prolonged exposure.

**Storage**

Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a closed container away from incompatible materials. Guard against dust accumulation of this material. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.

**8. Exposure Controls / Personal Protection**

**Occupational exposure limits**

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Crystalline Silica in the form of Quartz (14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Components	Type	Value	Form
Crystalline Silica in the form of Quartz (14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

**Exposure guidelines**

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

---

<b>Engineering controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Wear dust goggles.
<b>Skin protection</b>	Protective gloves. Wear suitable protective clothing. Closed-toe shoes recommended.
<b>Respiratory protection</b>	Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit. 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.
<b>General hygiene considerations</b>	Do not breathe dust. Wash hands before breaks and immediately after handling the product. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical & Chemical Properties

<b>Appearance</b>	Powder.
<b>Physical state</b>	Solid.
<b>Form</b>	Solid.
<b>Color</b>	Light cream.
<b>Odor</b>	Odorless.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Boiling point</b>	Not available.
<b>Melting point/Freezing point</b>	Not available.
<b>Solubility (water)</b>	Insoluble
<b>Specific gravity</b>	Not available.
<b>Relative density</b>	Not available.
<b>Flash point</b>	Not applicable
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Bulk density</b>	12.3 lb/gal
<b>Other data</b>	
<b>Density</b>	1.70 g/cm <sup>3</sup> g/cm <sup>3</sup>

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable at normal conditions.
<b>Conditions to avoid</b>	Heat, flames and sparks.

---

---

<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon monoxide, carbon dioxide, oxides of nitrogen. Hydrogen chloride gas
<b>Possibility of hazardous reactions</b>	Will not occur under normal conditions.

## 11. Toxicological Information

### Toxicological data

Product	Species	Test Results
SAFEVERT VISCOSIFIER (Mixture)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
<b>Sensitization</b>	Not expected to be hazardous by OSHA criteria.	
<b>Chronic effects</b>	<p>Hazardous by OSHA criteria. Prolonged or repeated exposure may cause lung injury. Prolonged exposure may cause chronic effects. In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.</p>	

**Carcinogenicity** Hazardous by OSHA criteria. Cancer hazard.

#### ACGIH Carcinogens

Crystalline Silica in the form of Quartz (CAS 14808-60-7) A2 Suspected human carcinogen.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Crystalline Silica in the form of Quartz (CAS 14808-60-7) 1 Carcinogenic to humans.

**Skin corrosion/irritation** Irritating to skin.

**Neurological effects** Not expected to be hazardous by OSHA criteria.

## 12. Ecological Information

**Environmental effects** Ecological injuries are not known or expected under normal use. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Persistence and degradability** Not available.

## 13. Disposal Considerations

**Disposal instructions** Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

---

## 14. Transport Information

### DOT

Not regulated as dangerous goods.

### TDG

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

## 15. Regulatory Information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

### Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))

Not regulated.

### DEA Essential Chemical Code Number

Not regulated.

### Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated.

### DEA Exempt Chemical Mixtures Code Number

Not regulated.

### CERCLA (Superfund) reportable quantity

None

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

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

#### Section 302 extremely hazardous substance

No

#### Section 311 hazardous chemical

No

### Inventory status

#### Country(s) or region

#### Inventory name

#### On inventory (yes/no)\*

Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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

**US - New Jersey RTK - Substances: Listed substance**

Crystalline Silica in the form of Quartz (CAS 14808-60-7) Listed.

**US - Pennsylvania RTK - Hazardous Substances: Listed substance**

Crystalline Silica in the form of Quartz (CAS 14808-60-7) Listed.

**16. Other Information**

**Recommended restrictions** Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

**HMIS® ratings**  
 Health: 2\*  
 Flammability: 1  
 Physical hazard: 1  
 Personal protection: E

**NFPA ratings**  
 Health: 2  
 Flammability: 1  
 Instability: 1

**Disclaimer** THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US, AND IS BELIEVED TO BE ACCURATE, ALTHOUGH NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY THE COMPANY IN THIS RESPECT. SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. SUCH CONDITIONS MUST COMPLY WITH ALL GOVERNMENTAL REGULATIONS.



---

**This data sheet contains changes from the previous version in section(s):**

Product and Company Identification: Product and Company Identification  
Hazards Identification: Emergency overview  
Hazards Identification: Skin  
Hazards Identification: Inhalation  
Composition / Information on Ingredients: Ingredients  
First Aid Measures: Ingestion  
Exposure Controls / Personal Protection: Respiratory protection  
Physical & Chemical Properties: Multiple Properties  
Physical & Chemical Properties: Color  
Physical & Chemical Properties: Form  
Chemical Stability & Reactivity Information: Incompatible materials  
Chemical Stability & Reactivity Information: Hazardous decomposition products  
Toxicological Information: Toxicological Data  
Toxicological Information: Acute effects  
Toxicological Information: Corrosivity