

1. Product and Company Identification

Material name S-1100
Version # 01
Issue date 05-30-2013
Revision date 05-30-2013
Supersedes date 06-20-2012
Chemical description Inorganic Alkaline Salt
CAS # Mixture
Product code 900-0007
Product use Industrial Leak Sealant
Manufacturer information
Manufacturer/Supplier Team Industrial Services, Inc.
 200 Hermann Drive, Alvin, Texas 77511
Emergency Contact CHEMTREC - 24 HOURS
 USA: CHEMTREC: 800-424-9300
 International: 703-527-3887 (Collect)

2. Hazards Identification

Physical state Solid.
Appearance Paste.
Emergency overview WARNING
 May cause severe eye irritation. Causes skin and respiratory tract irritation. When cured: Mechanical processing may generate dust.
OSHA regulatory status This product is hazardous according to OSHA 29 CFR 1910.1200.
Potential health effects
Routes of exposure Eye contact. Skin contact.
Eyes May cause eye irritation. May cause severe eye irritation.
Skin May cause skin irritation.
Inhalation May cause respiratory tract irritation.
Ingestion Ingestion may cause irritation and malaise.
Chronic effects Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
Signs and symptoms Irritation of eyes and mucous membranes. Skin irritation. Irritation of nose and throat. Ingestion may cause irritation and malaise.
Potential environmental effects The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Quartz	14808-60-7	25-50
Water	7732-18-5	25-50
Aluminium hydroxide	21645-51-2	10-25
Silicic acid, sodium salt	1344-09-8	10-25

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin contact	Remove contaminated clothing and wash skin with soap and water. Get medical attention if irritation develops or persists.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	Have victim rinse mouth thoroughly with water. If material is ingested, immediately contact a poison control center. Do not induce vomiting without advice from poison control center. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to physician

Treat symptomatically.

General advice

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In case of shortness of breath, give oxygen. Keep victim warm.

5. Fire Fighting Measures

Flammable properties

No unusual fire or explosion hazards noted.

Extinguishing media

Suitable extinguishing media Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media No restrictions known.

Protection of firefighters

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Protective equipment and precautions for firefighters Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials. Cool material exposed to heat with water spray and remove it if no risk is involved.

Hazardous combustion products

None known.

6. Accidental Release Measures

Personal precautions

Avoid inhalation of vapors/dust and contact with skin and eyes. Wear appropriate protective equipment and clothing during clean-up. See Section 8 of the MSDS for Personal Protective Equipment.

Environmental precautions

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not contaminate water. Contact local authorities in case of spillage to drain/aquatic environment.

Methods for containment

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

For Small Spills: Absorb with sand or other non-combustible absorbent material and place into containers for later disposal.

Large Spills: Remove with vacuum trucks or pump to storage/salvage vessels. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Wash area with soap and water. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labeled container.

This material and its container must be disposed of as hazardous waste.

Other information

Clean up in accordance with all applicable regulations. 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

Handling

Provide adequate ventilation. Avoid inhalation of mist and contact with skin and eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Observe good industrial hygiene practices.

Storage

Keep in a cool, well-ventilated place. Keep away from food, drink and animal feeding stuffs. Store away from incompatible materials (See Section 10).

8. Exposure Controls / Personal Protection**Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	1 mg/m ³	Respirable fraction.
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

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

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.3 mg/m ³ 0.1 mg/m ³ 2.4 mppcf	Total dust. Respirable. Respirable.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable particles.

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	1 mg/m ³	Respirable.
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m ³	Respirable fraction.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	1 mg/m ³	Respirable fraction.
Quartz (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable.

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0.1 mg/m ³	Respirable dust.

Mexico. Occupational Exposure Limit Values

Components	Type	Value
Quartz (CAS 14808-60-7)	TWA	0.1 mg/m ³

Engineering controls

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust.

Personal protective equipment**Eye / face protection**

Risk of contact: Wear approved safety glasses or goggles.

Skin protection

Wear protective gloves. Wear suitable protective clothing.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

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 & Chemical Properties**Appearance**

Paste.

Physical state

Solid.

Form	Paste.
Color	Gray.
Odor	Odorless.
Odor threshold	Not available. pH
	Not available.
Vapor pressure	23 mm Hg (75°F)
Vapor density	Not available.
Boiling point	212 °F (100 °C)
Melting point/Freezing point	Not available.
Solubility (water)	Dispersible.
Specific gravity	1.35
Flash point	302 °F (150 °C) Closed Cup
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
Evaporation rate	1
Partition coefficient (n-octanol/water)	No data available.

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Evaporative drying.
Incompatible materials	None known.
Hazardous decomposition products	Carbon dioxide. Carbon oxides. Silicon oxides.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Aluminium hydroxide (CAS 21645-51-2)		
Acute		
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg
Silicic acid, sodium salt (CAS 1344-09-8)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	>= 4640 mg/kg
<i>Oral</i>		
LD50	Mouse	1100 mg/kg
	Rat	1960 mg/kg
		1.1 g/kg

Sensitization	Not a skin sensitizer.
Acute effects	Ingestion may cause irritation and malaise.
Local effects	Causes severe eye irritation. Causes skin and respiratory tract irritation.
Chronic effects	No additional adverse health effects noted.
Carcinogenicity	Risk of cancer cannot be excluded with prolonged exposure. When cured: Prolonged breathing of high levels of crystalline silica can cause silicosis. Also, airborne crystalline silica is possibly carcinogenic to humans.

ACGIH Carcinogens

Aluminium hydroxide (CAS 21645-51-2)
Quartz (CAS 14808-60-7)

A4 Not classifiable as a human carcinogen.
A2 Suspected human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Quartz (CAS 14808-60-7)

1 Carcinogenic to humans.

US NTP Report on Carcinogens: Known carcinogen

Quartz (CAS 14808-60-7)

Known To Be Human Carcinogen.

Symptoms and target organs Irritation of eyes and mucous membranes. Skin irritation. Irritation of nose and throat.

12. Ecological Information

Ecotoxicological data

Components	Species	Test Results
Silicic acid, sodium salt (CAS 1344-09-8)		
Aquatic		
Crustacea	EC50	Water flea (Ceriodaphnia dubia) 0.28 - 0.57 mg/l, 48 hours
Fish	LC50	Western mosquitofish (Gambusia affinis) 1800 mg/l, 96 hours
Ecotoxicity	The product is not expected to be hazardous to the environment.	
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.	
Persistence and degradability	No data available.	
Bioaccumulation / Accumulation	No data available.	
Partition coefficient	No data available.	
Mobility in environmental media	No data available.	

13. Disposal Considerations

Waste codes	Not regulated.
Disposal instructions	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Recover and reclaim or recycle, if practical.
Contaminated packaging	Dispose product packaging in accordance with local authority requirements taking into account characteristics of the packaging material.

14. Transport Information

DOT

Not regulated as a hazardous material by DOT.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

TDG

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.

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

Not regulated.

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

Not regulated.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

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 (40 CFR 355, Appendix A)	No
Section 311/312 (40 CFR 370)	Yes
Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)	Not controlled
Canadian regulations	This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
WHMIS status	Controlled
WHMIS classification	D2B - Other Toxic Effects-TOXIC
WHMIS labeling	



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
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
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 this product complies 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 - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Quartz (CAS 14808-60-7) Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Quartz (CAS 14808-60-7) Listed: October 1, 1988 Carcinogenic.

US - New Jersey RTK - Substances: Listed substance

Quartz (CAS 14808-60-7) Listed.

US. Massachusetts RTK - Substance List

Quartz (CAS 14808-60-7) Listed.

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

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Quartz (CAS 14808-60-7) Listed.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 2*
Flammability: 0
Physical hazard: 0

NFPA ratings

Health: 2
Flammability: 0
Instability: 0

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.