

SAFETY DATA SHEET**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name or designation of the mixture	S-1100
Registration number	-
Synonyms	None.
Product code	900-0007
Issue date	30-May-2013
Version number	01
Revision date	30-May-2013
Supersedes date	20-June-2012

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

Identified uses	Industrial Leak Sealant
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet**Supplier**

Company name	Team Industrial Services, Inc.
Address	Postbus 37 4380 AA Vlissingen 3237 The Netherlands
Telephone	+31 (0) 118 48 58 00 Fax +31 (0) 118 48 58 86
e-mail	Not available.
Contact person	Not available.

1.4. Emergency telephone number +1 703-527-3887

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification Xi;R37/38-41

Classification according to Regulation (EC) No 1272/2008 as amended**Health hazards**

Skin corrosion/irritation	Category 2	H315 - Causes skin irritation.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Specific target organ toxicity - single exposure	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.

Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	Irritating to respiratory system and skin. Risk of serious damage to eyes. Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.
Environmental hazards	Not classified for hazards to the environment.
Specific hazards	Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
Main symptoms	Irritation of eyes and mucous membranes. Skin irritation. Irritation of nose and throat. Ingestion may cause irritation and malaise.

2.2. Label elements**Label according to Regulation (EC) No. 1272/2008 as amended**

Contains: Silicic acid, sodium salt, Water

Hazard pictograms**Signal word**

Danger

Hazard statements

H318 - Causes serious eye damage.
 H315 - Causes skin irritation.
 H335 - May cause respiratory irritation.

Precautionary statements**Prevention**

P264 - Wash thoroughly after handling.
 Wear protective gloves/eye protection. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
 P271 - Use only outdoors or in a well-ventilated area.

Response

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
 P332 + P313 - If skin irritation occurs: Get medical advice/attention.
 P362 - Take off contaminated clothing and wash before reuse.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 - Immediately call a POISON CENTRE or doctor/physician.
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P312 - Call a POISON CENTRE or doctor/physician if you feel unwell.

Storage

Store away from incompatible materials.

Disposal

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information

Not applicable.

2.3. Other hazards

Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Quartz	25-50	14808-60-7 238-878-4	-	-	
Classification:	DSD: -				
	CLP: -				
Water	25-50	7732-18-5 231-791-2	-	-	
Classification:	DSD: -				
	CLP: -				
Aluminium hydroxide	10-25	21645-51-2 244-492-7	-	-	
Classification:	DSD: -				
	CLP: -				
Silicic acid, sodium salt	10-25	1344-09-8 215-687-4	-	-	
Classification:	DSD: Xi;R37/38-41				
	CLP: Skin Irrit. 2;H315, Eye Dam. 1;H318, STOT SE 3;H335				

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

#: This substance has been assigned Community workplace exposure limit(s).

Composition comments

The full text for all R- and H-phrases is displayed in section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures**General information**

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.

4.1. Description of first aid measures

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.
Skin contact	Remove contaminated clothing and wash skin with soap and water. Get medical attention if irritation develops or persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Ingestion	Have victim rinse mouth thoroughly with water. If material is ingested, immediately contact a physician or poison control centre. Do not induce vomiting without advice from poison control centre. 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.

4.2. Most important symptoms and effects, both acute and delayed Irritation of eyes and mucous membranes. Skin irritation. Irritation of nose and throat. Ingestion may cause irritation and malaise.

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

SECTION 5: Firefighting measures

General fire hazards The product is not flammable.

5.1. Extinguishing media

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

Unsuitable extinguishing media No restrictions known.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment 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.

Special fire fighting procedures 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Avoid inhalation of vapors/dust and contact with skin and eyes. Wear appropriate protective equipment and clothing during clean-up. See Section 8 for personal protective equipment.

For emergency responders Use personal protection recommended in Section 8 of the SDS. Keep unnecessary personnel away. Avoid inhalation of vapours or mists.

6.2. 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.

6.3. Methods and material for containment and cleaning up Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Small Spills: Absorb spillage with non-combustible, absorbent material.

Large Spills: 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 labelled container.

6.4. Reference to other sections For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe 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.

7.2. Conditions for safe storage, including any incompatibilities Keep in a cool, well-ventilated place. Keep away from food, drink and animal feeding stuffs. Store away from incompatible materials (See Section 10).

7.3. Specific end use(s) Industrial Leak Sealant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits**Austria. MAK List**

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	MAK	5 mg/m ³	Respirable fraction.
	STEL	10 mg/m ³	Inhalable fraction.
		20 mg/m ³	Inhalable fraction.
Quartz (CAS 14808-60-7)	MAK	10 mg/m ³ 0,15 mg/m ³	Respirable fraction. Respirable dust.

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m ³	Respirable dust.

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,07 mg/m ³	Respirable fraction.

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m ³	Respirable dust.

Denmark. Exposure Limit Values

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TLV	0,3 mg/m ³	Total
		0,1 mg/m ³	Respirable.

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m ³	Respirable dust.

Finland. Workplace Exposure Limits

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,2 mg/m ³	Respirable.
		0,05 mg/m ³	Respirable.

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	VME	0,1 mg/m ³	Respirable fraction.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	4 mg/m ³	Inhalable dust.
		1,5 mg/m ³	Respirable dust.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	AGW	3 mg/m ³	Respirable fraction.
		10 mg/m ³	Inhalable fraction.

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,15 mg/m ³	Respirable.

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,3 mg/m ³	Total dust.
		0,1 mg/m ³	Respirable dust.

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m ³	Respirable dust.

Italy. OELs

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.

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	6 mg/m ³	

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	6 mg/m ³	
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m ³	Respirable fraction.

Netherlands. OELs (binding)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,075 mg/m ³	Respirable dust.

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TLV	0,3 mg/m ³	Total dust.
		0,1 mg/m ³	Respirable dust.

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	2,5 mg/m ³	Fume, total dust.
		1,2 mg/m ³	Respirable dust and/or fume.
Quartz (CAS 14808-60-7)	TWA	2 mg/m ³	Total dust.
		0,3 mg/m ³	Respirable dust.

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,025 mg/m ³	Respirable fraction.

Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	4 mg/m ³	Inhalable fraction.
		1,5 mg/m ³	Respirable fraction.
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m ³	

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,15 mg/m ³	Respirable fraction.

Spain. Occupational Exposure Limits

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m ³	Respirable fraction.

Sweden. Occupational Exposure Limit Values

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m ³	Respirable dust.

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	TWA	3 mg/m ³	Respirable dust.
Quartz (CAS 14808-60-7)	TWA	0,15 mg/m ³	Respirable dust.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Quartz (CAS 14808-60-7)	TWA	0,1 mg/m ³	Respirable.

Biological limit values

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling time
Aluminium hydroxide (CAS 21645-51-2)	200 µg/l	Aluminium	Urine	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no-effect level (DNEL)

Components	Type	Route	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	Workers	Inhalation	3,59 mg/m ³	Long term exposure local effects

Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
Aluminium hydroxide (CAS 21645-51-2)	Aqua (freshwater)	Not applicable	74,9 µg/l	
	STP	Not applicable	20 mg/l	

8.2. Exposure controls

Appropriate engineering controls Provide adequate ventilation. Observe occupational exposure limits and minimise the risk of inhalation of dust.

Individual protection measures, such as personal protective equipment

General information	Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Risk of contact: Wear approved safety glasses or goggles.
Skin protection	
- Hand protection	Wear protective gloves.
- Other	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 case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter (type P2).
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.

Hygiene measures 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.

Environmental exposure controls Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Paste.
Physical state	Solid.
Form	Paste.
Colour	Grey.
Odour	Odourless.
Odour threshold	Not available.

pH	Not applicable.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	100 °C (212 °F)
Flash point	150 °C (302 °F) Closed cup
Evaporation rate	1
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	23 mm Hg (75°F)
Vapour density	Not applicable.
Relative density	Not available.
Solubility(ies)	Dispersible.
Partition coefficient (n-octanol/water)	No data available.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Explosive properties	Not available.
Oxidizing properties	Not available.
9.2. Other information	No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	Will not occur.
10.4. Conditions to avoid	Evaporative drying.
10.5. Incompatible materials	None known.
10.6. Hazardous decomposition products	Carbon dioxide. Carbon oxides. Silicon oxides.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Ingestion	Ingestion may cause irritation and malaise.
Inhalation	May cause respiratory tract irritation.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye damage.
Symptoms	Irritation of eyes and mucous membranes. Skin irritation. Irritation of nose and throat.

11.1. Information on toxicological effects

Acute toxicity Ingestion may cause irritation and malaise.

Components	Species	Test results
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

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation	Not available.
Skin sensitisation	Not a skin sensitiser.
Germ cell mutagenicity	Not available.
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.
Reproductive toxicity	Not available.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Test data conclusive but not sufficient for classification.
Aspiration hazard	Not available.
Mixture versus substance information	Not available.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity The product is not expected to be hazardous to the environment.

Components	Species	Test results
Silicic acid, sodium salt (CAS 1344-09-8)		
Aquatic		
Crustacea	EC50	Water flea (<i>Ceriodaphnia dubia</i>) 0,28 - 0,57 mg/l, 48 hours
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>) 1800 mg/l, 96 hours

12.2. Persistence and degradability No data available.

12.3. Bioaccumulative potential No data available.

Partition coefficient n-octanol/water (log Kow) No data available.

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

Mobility in general No data available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects The product is not expected to be hazardous to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose product packaging in accordance with local authority requirements taking into account characteristics of the packaging material.
EU waste code	08 04 09*
Disposal methods/information	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.

SECTION 14: Transport information

ADR

The product is not covered by international regulation on the transport of dangerous goods.

RID

The product is not covered by international regulation on the transport of dangerous goods.

ADN

The product is not covered by international regulation on the transport of dangerous goods.

IATA

The product is not covered by international regulation on the transport of dangerous goods.

IMDG

The product is not covered by international regulation on the transport of dangerous goods.

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

This substance/mixture is not intended to be transported in bulk.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Silicic acid, sodium salt (CAS 1344-09-8)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work

Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding

Not regulated.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances

Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Not listed.

Directive 94/33/EC on the protection of young people at work

Not listed.

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended and respective national laws implementing EC directives. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Not available.

15.2. Chemical safety assessment

Not available.

SECTION 16: Other information

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

Not available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R37/38 Irritating to respiratory system and skin.
R41 Risk of serious damage to eyes.

H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.

Training information

Not available.

Disclaimer

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