

SAFETY DATA SHEET



SECTION 1 - IDENTIFICATION OF PRODUCT AND SUPPLIER

PRODUCT IDENTIFIER	RIGIDIZER
OTHER NAMES	Ceramic Fibre Hardener
PRODUCT CODE	SMRIGID/10
PHYSICAL DESCRIPTION	Clear to hazy, colourless, odourless, inorganic, think liquid.
USES	Hardening agent for application by spray or brush to Ceramic Fibre Blanket or Board to improve resistance to gas flow erosion and abrasion.

MANUFACTURER/IMPORTER

COMPANY NAME ADDRESS	SILA AUSTRALIA PTY LTD 37-39 Wittenberg Drive Canning Vale, WA 6155
TELEPHONE	
WORKING HOURS:	(08) 9455 3133
FAX:	(08) 9455 3331
E-MAIL	info@sila.com.au
WEBSITE	www.sila.com.au

EMERGENCY CONTACT 13 11 26 - Poisons Information Centre

SECTION 2 - HAZARD INDENTIFICATION

Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Not Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road, Rail & Air (ADG Code)

SIGNAL WORD WARNING

HAZARD STATEMENT

Hazard Category	Hazard Statement	Symbol
Acute Toxicity, Category 5 Skin Irritation, Category 3 Eye Irritation STOT: Single Exposure, Category 3	H302: Harmful if swallowed H313: May be harmful in contact with skin H315: Causes skin irritation H319: Causes serious eye irritation H333: May be harmful if inhaled H335: May cause respiratory irritation	

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P264: Wash hands/skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P281: Use personal protective equipment as required. Response: P312: Call a POISON CENTER or doctor/physician if you feel unwell. P315: Get immediate medical advice/attention. P301 +P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comforta 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. P333 + P313: If skin irritation or rash occurs: Get medical advice/attention. P337 + P313: If eye irritation persists: Get medical advice/attention. Storage: P402: Store in a dry place. P411: Store at temperatures not exceeding 30 °C	Prevention:	P260: Do not breathe vapours.
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	Storage:	P402: Store in a dry place.
Disposal: P501: Dispose of contents/container in accordance with local laws		P411: Store at temperatures not exceeding 30 °C
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PRECAUTIONARY STATEMENTS

SECTION 3 - COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Proportion (%)
Sodium Silicate	6834-92-0	30-60
Water	7732-18-5	30-60
Notes: May Contain Contaminants <1%		

SECTION 4 – FIRST AID MEASURES

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

	Call a POISON CENTER or doctor/physician if you feel unwell.
Skin Contact:	Wash with plenty of soap and water.
	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	If skin irritation or rash occurs: Get medical advice/attention.
Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Get immediate medical advice/attention.
Ingestion:	Rinse mouth. Do NOT induce vomiting.
	Give water to drink
	Call a POISON CENTER or doctor/physician if you feel unwell.
First Aider Safety:	Ensure not to get exposed by Inhalation, Ingestion or eye contact while assisting. Wash skin with plenty of soap and water after assisting.

Symptoms of Exposure

Inhalation:	Can cause irritation, redness of upper and lower airways coughing and difficulty
	breathing
Skin Contact:	can cause irritation, redness, itchiness swelling, burning and inflammation. Prolonged exposure may result in dryness, cracking and dermatitis. Effects may develop over 2 days
Eye Contact:	Causes serious eye irritation, pain, burns to eyelids, conjunctivitis, corneal edema and corneal burn. Effects may develop over 2 days

Ingestion: May cause irritation, swelling, and perforation of upper and lower gastrointestinal tissues. Permanent scarring may occur.

Medical Attention and Special Treatment

Advice to Doctor

Treat as a corrosive substance. Treat symptoms with supportive care. There is no specific antidote. The absence of visible signs or symptoms of burns does NOT reliably exclude the presence of actual tissue damage. It may take 48-72 hours to assess the extent of an ocular burn. Probable mucosal damage may contraindicate the use of gastric lavage.

Medical Conditions Aggravated by Exposure

May aggravate pre-existing conditions such as: Eye disorders that decrease tear production or have reduced integrity. Skin disorders that compromise the integrity of the skin such as: psoriasis, rashes, eczema, skin infections. Pulmonary disorders that compromise the integrity of the lungs such as asthma.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Equipment

Non-flammable, use extinguisher appropriate for surrounding fire.

Specific Hazards Arising From Chemical

N/A

Special PPE for Fire Fighters

N/A

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Evacuate all unnecessary personnel. Personnel involved in the clean-up should wear full protective clothing as listed in section 8. Do not touch or walk through spilled material. Eliminate all sources of ignition. Increase ventilation.

Environmental precautions

Do NOT let product reach drains or waterways. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management. High pH of this material is harmful to aquatic life.

Methods and material for containment and cleaning up

Stop leak if you can do so without risk. Prevent runoff from entering into storm sewers and ditches which lead to natural waterways. Isolate, dike and store discharged material, if possible. Use sand or earth to contain spilled material. If containment is impossible, neutralize contaminated area and flush with large quantities of water.

SECTION 7 - HANDLING & STORAGE, INCLUDING SAFE USAGE

Safe Handling Precautions

Avoid contact with eyes, skin and clothing. Avoid breathing spray mist. Keep container closed. Promptly clean residue from closures with cloth. Ensure an eye bath and safety shower are available and ready for use. Wash thoroughly after handling. Loading temperature 45-95 deg C. Use in well ventilated area. Follow normal industrial safety practices. The use of protective clothing and equipment depends on the degree and nature of exposure.

Storage Conditions

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Store away from incompatible materials as listed in section 10. Store away from acids and foodstuffs. Store in clean steel or plastic containers. Separate from acids, reactive metals, and ammonium salts. Storage temperature 0-95°C. Loading temperature 45-95°C. Do not store in aluminium, fiberglass, copper, brass, zinc or galvanized containers.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Standards

No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). Sodium Silicate: TWA 5mg/m3 (STEL 5mg/m3) This standard is the manufacturers recommended limit for good practice. All atmospheric contamination should be minimised.

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Use in well ventilated area. Avoid generating and inhaling mists.

Personal Protective Equipment

Face and Eyes:	Safety glasses, goggles or face shield as appropriate
Skin Protection:	Plastic or rubber gloves Overalls, splash apron or similar protective apparel
	and chemical resistant boots
Respiratory Protection:	Respiratory in not normally required due to low inhalation risk
Thermal Hazards:	N/A

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Thick Liquid
ODOUR	Odorless
ODOUR THRESHOLD	N/A
рН	11-13
MELTING/FREEZING POINT	approximately 0°C
CONDENSING/BOILING POINT	101-102°C
FLASH POINT	N/A
EVAPOURATION RATE	N/A
FLAMMABILITY	Not Flammable
UPPER/LOWER FLAMMABLITY	N/A
OR EXPLOSIVE LIMITS	
VAPOUR PRESSURE	N/A
VAPOUR DENSITY	N/A
SPECIFIC GRAVITY	1.2-1.7
SOLUBILITY	Soluble in Water
PARTITION COEFFICIENT:	N/A
n-octanol/water	
AUTO-IGNTION TEMPERATURE	N/A
DECOMPOSITION TEMPERATURE	101-102°C
VISCOSITY	N/A
VOLITILE PERCENT	>50%
SATURATED VAPOUR CONCENTRATION	N/A
RELEASE OF FLAMMABLE VAPOURS	Under prolonged contact with metals like aluminum, tin, lead and zinc releases hydrogen gas

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Reactive Substance.
Chemical Stability	Absorbs carbon dioxide on exposure to air resulting in silica precipitation.
Conditions to Avoid	Prolonged exposure to air and storage above 60°C.
Incompatible Materials	Alkali sensitive metals, reacts with acids reacts with some ammonium salts.
Hazardous Decomposition	
Products	Flammable Hydrogen produced on contact to some metals. Heat produced on
	mixing with acids. Reaction with some ammonium salts produces ammonia gas.

SECTION 11 - TOXILOGICAL INFORMATION

ΑСUTE ΤΟΧΙCITY	Expected to be low toxicity
SKIN CORROSION/IRRITATION	Causes skin irritation
SERIOUS EYE DAMAGE/IRRITATION	Causes irritation to eyes
RESPIRATORY OR SKIN SENSITISATION	Not expected to be a sensitizer
GERM CELL MUTAGENITY	Not expected to cause mutagenic
CARCINGENICTY	suspected to be cacogenic
REPRODUCTIVE TOXICITY	Not expected to cause reproductive problems
STOT-SINGLE EXPOSURE	Cause irritation to eyes, respiration and skin
STOT-REPEATED EXPOSURE	Repeated inhalation may cause respiratory problems
	Repeated eye contact may cause serious eye damage
	Repeated skin contact may cause serious skin damage
ASPIRATION HAZARD	Irritation and respiratory difficulties may result

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	Concentrated product has high pH which is damaging to aquatic life however rapid dilute mean concertation persisting is unlikely
Persistence/Degradability	The product is not expected to persist as it diluted rapidly in water and reacts with acids to neutralize. Diluted material depolymerizes to form silica indistinguishable from natural silica.
Bioaccumulation Potential Mobility in Soil Other Adverse Effects	The product is not expected to bioaccumulate Expected to be mobile and degrade quickly in sol N/A

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Process Dispose of in accordance with local laws. Contact a specialist waste management company for further advice. Can be disposed of in landfill after neutralization.

SECTION 14 - TRANSPORT INFORMATION

Not Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road, Rail & Air (ADG Code)

Proper Shipping Name	Sodium Silicate Solution
Class	N/A
Subsidiary Risk(s)	N/A
UN Number	N/A
Hazchem	N/A
Pack Group	N/A
Special Provision	N/A

SECTION 15 - REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) Poisons Schedule number:5Australian Inventory of Chemical Substances (AICS):Component Materials ListedDangerous good Initial Emergency Response Guide (SAA/SNZ HB76):N/A

SECTION 16 - ANY OTHER RELEVANT INFORMATION

Date of Preparation	27/06/2017
Revision	2
Revision Date	02/09/2019
Changes in this revision	Update to new format & letterhead

Key/Legend	
AICS	Australian Inventory of Chemical Substances
AS	Australian Standards
ASCC	Australian Safety and Compensation Council
CAS	Chemical Abstracts Service (Registry Number)
сР	centipoise
deg C	(°C) Degrees Celsius
LD50	LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which
_	causes the death of 50% (one half) of a group of test animals.
N/A	Not Applicable
рН	Potential of Hydrogen, a number between 0 and 14 that indicates if a chemical is an acid
	or a base
PPE	Personal Protective Equipment
ppm	Parts per million
STEL	Short Term Exposure Limit
STOT	Specific Target Organ Toxicity
тос	Total organic carbon
TWA	Time Weighted Average
UN	United Nations
WA	Western Australia

Disclaimer

The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the foregoing data and safety information. In addition, no responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.