FIREPRO® GLUE

Revision Date: 01/06/2017

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Firepro® Glue

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

Identified uses:

Sodium silicate based adhesive

Uses advised against:

No specific uses advised against are identified.

1.3 Details of supplier

ROCKWOOL® Pencoed, Bridgend, CF35 6NY REACH registration number 01-2119472313-44

1.4 Emergency telephone number

ROCKWOOL® Ltd Customer Support 9am-5pm Tel: 01656 862621 Email: SDS@rockwool.com

2. Hazards identification

2.1 Classification of the substance or mixture Classification (EC 1272/2008)

Physical hazards:

Not Classified

Health hazards:

Not Classified

Environmental hazards:

Not Classified

Human health:

Irritating to eyes.

Environmental:

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

Physicochemical:

When handled correctly, undamaged units represent no danger.

2.2 Label elements

Hazard statements:

NC Not Classified

Precautionary statements:

P302+P352 IF ON SKIN: Wash with plenty of water.

Supplemental label information:

EUH210 Safety data sheet available on request.

2.3 Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

3.2 Mixtures

Composition comments:

Preparation containing sodium silicate and mineral filler

Chemical Nature:

4. First aid measures

4.1 Description of first aid measures

General information:

Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Inhalation:

Move affected person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion:

Do not induce vomiting. Never give anything by mouth to an unconscious person. Do notinduce vomiting. Rinse mouth thoroughly with water. Get medical attention.

Skin contact:

Remove affected person from source of contamination. Get medical attention if irritation persists after washing.

Eye contact:

Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

Protection of first aiders:

First aid personnel should wear appropriate protective equipment during any rescue. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.



4.2 Most important symptoms and effects, both acute and delayed

General information:

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation:

This is unlikely to occur but symptoms similar to those ofingestion may develop.

Ingestion:

May cause stomach pain or vomiting.

Skin contact:

Prolonged skin contact may cause redness and irritation.

Eye contact:

May cause temporary eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

No specific recommendations. If in doubt, get medical attention promptly.

Specific treatments:

Treat symptomatically.

5. Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray, fog or mist. Foam. Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc.

Unsuitable extinguishing media:

None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards:

Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours. Carbon dioxide (CO2). Carbon monoxide (CO).

Hazardous combustion products:

Does not decompose when used and stored as recommended.

5.3 Advice for firefighters

Protective actions during firefighting:

Use water to keep fire exposed containers cool and disperse vapours.

Special protective equipment for firefighters:

Wear chemical protective suit.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:

Wear protective clothing as described in Section 8 of this safety data sheet.

For non-emergency personnel:

Wear protective clothing as described in Section 8 of this safety data sheet.

For emergency responders:

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2 Environmental precautions

Avoid discharge into drains or watercourses or onto the ground.

6.3 Methods and material for containment and cleaning up

Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4 Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

7. Handling and storage

7.1 Precautions for safe handling

Usage precautions:

Avoid spilling. Wear protective clothing, gloves, eye and face protection. Avoid contact with skin and eyes.

Advice on general occupational hygiene:

Provide eyewash station. Good personal hygiene procedures should be implemented.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions:

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at temperatures between 5° C and 25° C.

Storage class:

Unspecified storage.



7.3 Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

8. Exposure controls/Personal protection

8.1 Control parameters

Ingredient comments:

No exposure limits known for ingredient(s).

Sillcic Acid, sodium salt MOLAR RATIO 3:2 (CAS: 1344-09-8)

DNEL

Industry - Inhalation; Long term systemic effects: 5.61 mg/m³ Industry - Dermal; Long term systemic effects: 1.59 mg/kg/day Consumer - Oral; Long term systemic effects: 0.80 mg/kg/day Consumer - Inhalation; Long term systemic effects: 1.38 mg/m³ Consumer - Dermal; Long term systemic effects: 0.80 mg/kg/day

PNEC

Fresh water; 7.5 mg/l Marine water; 1 mg/l

Intermittent release; 7.5 mg/l

STP; 348 mg/l

8.2 Exposure controls

Protective equipment:





Appropriate engineering controls:

Provide adequate general and local exhaust ventilation.

Eye/face protection:

Wear chemical splash goggles. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 6 hours.

Other skin and body protection:

Avoid contact with skin. Wear appropriate clothing to prevent skin contamination.

Hygiene measures:

Provide eyewash station.

Respiratory protection:

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.

Thermal hazards:

Contact with hot product can cause serious thermal burns.

Environmental exposure controls:

Keep container tightly sealed when not in use.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance Viscous paste.

Colour White/off-white.

Odour No characteristic odour.

Odour threshold Not relevant.

pH (concentrated solution):

10 - 11

Melting point Not available.

Initial boiling point and range 100°C @ 760 mm Hg
Flash point No information required.

Evaporation rate Not available.

Evaporation factor Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability Not relevant.

or explosive limits

Other flammability Not available.

Vapour pressure No information available.

Vapour density Not available.

Relative density 1.70 - 1.71 @ @ 20°C

Bulk density

Not applicable.

Solubility(ies)

Not determined.

Miscible with water

Partition coefficient Not available.

Auto-ignition temperature Not available

Decomposition Temperature Not determined.

Viscosity 1,600,000 -

2,000,000 cP @ 20°C

Explosive properties No information available

Explosive under the influence No

of a flame

Oxidising properties Not applicable.



Comments:

Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

9.2 Other information

Refractive index
Particle size
Not available.
Molecular weight
Not available.
Volatility
Not applicable.
Saturation concentration
Critical temperature
Not available.
Volatile organic compound
Not relevant.

10. Stability and reactivity

10.1 Reactivity

Reactivity:

In contact with some metals can generate hydrogen gas, which can form explosive mixtures with air. The following materials may react violently with the product: Acids.

10.2 Chemical stability

Stability:

Stable at normal ambient temperatures and when used as recommended.

10.3 Possibility of hazardous reactions

Possibility of hazardous reactions:

Reactions with the following materials may cause explosions: Aluminium. Zinc.

10.4 Conditions to avoid

Conditions to avoid:

May react with aluminium, zinc and alloys to produce hydrogen gas. Avoid contact with strong acids.

10.5 Incompatible materials

Materials to avoid:

Alkali metals.

10.6 Hazardous decomposition products

Hazardous decomposition products:

Can react with sugar residues to form carbon monoxide

11. Toxicological information

11.1. Information on toxicological effects

Toxicological effects:

No data recorded.

Acute toxicity - oral:

Notes (oral LD_{50}) - Not determined.

Acute toxicity - dermal:

Notes (dermal LD_{50}) - Not determined.

Acute toxicity - inhalation:

Notes (inhalation LC_{50}) - Not determined.

Skin corrosion/irritation:

Animal data - Not determined.

Human skin model test:

Not determined.

Extreme pH:

Not applicable.

Serious eye damage/irritation:

Based on available data the classification criteria are not met.

Respiratory sensitisation:

Based on available data the classification criteria are not met.

Skin sensitisation:

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro:

Based on available data the classification criteria are not met.

Genotoxicity - in vivo:

Based on available data the classification criteria are not met.

Carcinogenicity:

Not applicable.

Reproductive toxicity

Fertility:

Based on available data the classification criteria are not met.

Development:

Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure:

Based on available data the classification criteria are not met.

Target organs:

Not relevant.

Specific target organ toxicity - repeated exposure:

Based on available data the classification criteria are not met.



Target organs:

Not relevant.

Aspiration hazard:

Not relevant.

General information:

Primary hazard is alkalinity of sodium silicate solution and its irritant effect on body tissues

Inhalation:

May cause respiratory system irritation.

Ingestion:

No specific health hazards known.

Skin contact:

Liquid may irritate skin.

Eye contact:

Irritating to eyes.

Acute and chronic health hazards:

No specific health hazards known.

Route of entry:

Skin and/or eye contact

Target organs:

Not relevant.

Medical symptoms:

No specific symptoms known.

Sillcic Acid, sodium salt MOLAR RATIO 3:2

Acute toxicity - oral

Acute toxicity oral (LD₅₀mg/kg):

3,400.0

Species:

Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀mg/kg):

5,000.0

Species:

Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l):

2,060.0

Species:

Rat

ATE inhalation (dusts/mists mg/l):

2,060.0



Specific target organ toxicity - repeated exposure STOT - repeated exposure:

NOAEL >159 mg/kg, 9.0 - 10.0, ISO 976, Rat

12. Ecological information

Ecotoxicity:

The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH. The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

Sillcic Acid, sodium salt MOLAR RATIO 3:2

Ecotoxicity:

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1 Toxicity

Acute toxicity - fish:

Not determined.

Acute toxicity - aquatic invertebrates:

Not determined

Acute toxicity - aquatic plants:

Not determined.

Acute toxicity – microorganisms:

Not determined.

Acute toxicity - terrestrial:

Not determined.

Chronic toxicity- fish early life stage:

Not determined.

Short term toxicity – embryo and sac fry stages:

Not determined.

Chronic toxicity – aquatic invertebrates:

Not determined.

Sillcic Acid, sodium salt MOLAR RATIO 3:2

Acute toxicity - fish:

LC₅₀, 96 hours: 1108 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates:

EC₅₀, 48 hours: 1700 mg/l, Daphnia magna

12.2. Persistence and degradability

The product contains only inorganic substances which are not biodegradable.

Phototransformation:

Not determined.

Stability (hydrolysis):

Not determined.

Biodegradation:

Inherently biodegradable.

Biological oxygen demand:

Not determined.

Chemical oxygen demand:

Not determined.

12.3. Bioaccumulative potential

Bioaccumulative potential:

The product contains potentially bioaccumulating substances.

Partition coefficient:

Not available.

12.4. Mobility in soil

Mobility:

The product is partly miscible with water and may spread in the aquatic environment.

Adsorption/desorption coefficient:

Not determined.

Henry's law constant:

Not determined.

Surface tension:

Not determined.

Sillcic Acid, sodium salt MOLAR RATIO 3:2

Mobility:

The product is soluble in water.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment:

This product does not contain any substances classified as PBT or vPvB.

Sillcic Acid, sodium salt MOLAR RATIO 3:2

Results of PBT and vPvB assessment:

This product does not contain any substances classified as PBT or vPvB.

12.6 Other adverse effects

None known.

13. Disposal considerations

13.1 Waste treatment methods

General information:

Dispose of waste product or used containers in accordance with local regulations

Disposal methods:

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14. Transport information

General:

The product is not covered by international regulations on the transport of dangerous goods (IMDG,IATA, ADR/RID).

Road transport notes:

Not classified.

Rail transport notes:

Not classified.

Sea transport notes:

Not classified.

Air transport notes:

Not classified.

14.1 UN number

UN No. (ADR/RID): NC

14.2 UN proper shipping name

14.3 Transport hazard class(es)

Transport labels:

No transport warning sign required.

14.4 Packing group

14.5 Environmental hazards

Environmentally hazardous substance/marine pollutant:

14.6. Special precautions for user

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

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

Not applicable.

15. Regulatory information

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



National regulations:

Control of Pollution Act 1974. The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

Health and Safety at Work etc. Act 1974 (as amended). EH40/2005 Workplace exposure limits.

EU legislation:

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Guidance:

Approved Classification and Labelling Guide (Sixth edition) L131. Workplace Exposure Limits EH40.

Authorisations (Title VII Regulation 1907/2006):

No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006):

No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

16. Other information

Abbreviations and acronyms

ATE:

Acute Toxicity Estimate.

ADR:

European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS:

Chemical Abstracts Service.

DNEL:

Derived No Effect Level.

GHS:

Globally Harmonized System.

IATA:

International Air Transport Association.

ICAO-TI:

Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG:

International Maritime Dangerous Goods.

Kow

Octanol-water partition coefficient.

LC₅₀:

Lethal Concentration to 50 % of a test population.

LD₅₀:

Lethal Dose to 50% of a test population (Median Lethal Dose).

PBT:

Persistent, Bioaccumulative and Toxic substance.

PNEC:

Predicted No Effect Concentration.

REACH:

Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.

RID:

European Agreement concerning the International Carriage of Dangerous Goods by Rail.

SVHC:

Substances of Very High Concern.

vPvB:

Very Persistent and Very Bioaccumulative.

IARC:

International Agency for Research on Cancer.

MARPOL 73/78:

International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.

cATpE:

Converted Acute Toxicity Point Estimate.

BCF:

Bioconcentration Factor.

BOD:

Biochemical Oxygen Demand.

EC₅₀:

50% of maximal Effective Concentration.

LOAEC:

Lowest Observed Adverse Effect Concentration.

LOAEL:

Lowest Observed Adverse Effect Level.

NOAEC:

No Observed Adverse Effect Concentration.



MATERIAL SAFETY DATASHEET

	_	_	_	
NΙ	\cap	Λ		٠.
ıν	$\mathbf{\mathcal{C}}$	м		∟.

No Observed Adverse Effect Level.

NOEC:

No Observed Effect Concentration.

LOEC:

Lowest Observed Effect Concentration.

DMEL:

Derived Minimal Effect Level.

UN:

United Nations.

IBC:

International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).

Key literature references and sources of data:

Dangerous Properties of Industrial Materials Report, N.Sax et.al.

Other information:

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

