SAFETY DATA SHEET

Reactive Sealant

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

SECTION 1: Identification of the substance / mixture and of the company / undertaking

Date issued	16.09.2019
Revision date	07.05.2024

1.1. Product identifier

Product name	Reactive Sealant
Synonyms	FireStop 400
Article no.	100731, 100733

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

Use of the substance / mixture	Sealant.

1.3. Details of the supplier of the safety data sheet

Company name	Fireseal AB
Postal address	Esbogatan 14
Postcode	SE-164 74
City	Kista
Country	Sweden
Email	info@fireseal.se, andreas.bengtsson@fireseal.se

1.4. Emergency telephone number

Emergency telephone	Telephone number: 999 Description: SOS.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Substance / mixture hazardous properties	Not regarded as a health or environmental hazard under current legislation.

2.2. Label elements

Supplemental label information	EUH 208 Contains Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

2.3. Other hazards

PBT / vPvB	Not PBT or vPvB.
Hazard description, general	The product has not been classified according to the legislation in force.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Ethanediol	CAS No.: 107-21-1 EC No.: 203-473-3 Index No.: 603-027-00-1	Acute Tox. 4; H302 STOT RE 2; H373	0,1 < 1 %	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS No.: 55965-84-9 Index No.: 613-167-00-5	Acute Tox. 3; H301 Acute Tox. 2; H310 Acute Tox. 2; H330 Skin Corr. 1C; H314 Skin Sens. 1A; H317 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH 071	< 0,01 %	

Substance comments	The full text for all hazard statements is displayed in section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Symptoms of poisoning may appear long after exposure. In case of the slightest doubt, direct exposure to the product or persistent discomfort, consult a doctor.
Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Skin contact	Remove/Take off immediately all contaminated clothing. Rinse the skin with very cold water and neutral soap. Get medical attention if any discomfort continues.
Eye contact	Important! Immediately rinse with water for at least 15 minutes. Make sure to remove any contact lenses from the eyes before rinsing. Do not attempt to remove contact lenses if they are stuck, as they may cause further damage. Seek medical attention immediately and show the product safety data sheet.
Ingestion	Seek medical attention immediately and show the product safety data sheet. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Rinse the mouth and throat as they may have been injured if swallowed.

4.2. Most important symptoms and effects, both acute and delayed

General symptoms and effects	Treat symptomatically.

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

Medical treatment	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	In case of fire, preferably use ABC extinguishers in accordance with the regulations for fire protection products.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	When heated and in case of fire, very toxic vapours/gases may be formed.

5.3. Advice for firefighters

Personal protective equipment	Use personal protective equipment as required.
Fire fighting procedures	Containers close to fire should be removed or cooled with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Use personal protective equipment as required.
Emergency procedures	Stop leak if safe to do so. Evacuate area.

6.2. Environmental precautions

Environmental precautionary measures	Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Containment	Absorb with sand or other inert absorbent. Do not absorb in sawdust or other combustible materials. For waste disposal, see section 13.

6.4. Reference to other sections

Other instructions	See section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Observe good chemical hygiene practices. Wash hands before breaks and before smoking, eating or drinking. When using do not eat, drink or smoke.

Protective safety measures

Protective safety measures	The product is not flammable under normal storage, handling and use. Pour slowly to avoid the formation of static electricity which could affect flammable products.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in tightly closed original container in a dry, cool and well-ventilated place.
Conditions to avoid	Do not expose the product to heat, radiation, static electricity and avoid contact with food.

Conditions for safe storage

Storage temperature	Value: ≤ 30 °C

7.3. Specific end use(s)

Specific use(s)	The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

DNEL / PNEC

DNEL	Group: Professional Route of exposure: Long-term dermal (systemic) Value: 106 mg/kg Comments: CAS: 107-21-1 Group: Professional Route of exposure: Long-term inhalation (local) Value: 35 mg/m³ Comments: CAS: 107-21-1 Group: Consumer Route of exposure: Long-term dermal (systemic) Value: 53 mg/kg Comments: CAS: 107-21-1 Group: Consumer Route of exposure: Long-term inhalation (local) Value: 7 mg/m³ Comments: CAS: 107-21-1
PNEC	Route of exposure: Freshwater Value: 10 mg/l Comments: CAS: 107-21-1 Route of exposure: Saltwater Value: 1 mg/l Comments: CAS: 107-21-1 Route of exposure: Freshwater sediments Value: 37 mg/kg Comments: CAS: 107-21-1 Route of exposure: Saltwater sediments Value: 3,7 mg/kg Comments: CAS: 107-21-1

	Route of exposure: Soil Value: 1,53 mg/kg Comments: CAS: 107-21-1

8.2. Exposure controls

Precautionary measures to prevent exposure

Appropriate engineering controls	Well-ventilated area.

Eye / face protection

Required Properties	Not relevant for normal use of the product.

Hand protection

Skin- / hand protection, short term contact	Protective gloves are not required for recommended use.

Skin protection

Suitable protective clothing	Protective clothing is not required for recommended use.

Respiratory protection

Respiratory protection, general	Use of protective equipment is necessary if misting occurs or if occupational exposure limits are exceeded.

Appropriate environmental exposure control

Environmental exposure controls	Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	White.
Odour	Data lacking.
Odour limit	Comments: Data lacking.
pH	Value: 8 -9,5
Melting point / melting range	Comments: Data lacking.
Freezing point	Comments: No data available
Boiling point / boiling range	Value: 172 °C
Flash point	Comments: Data lacking.
Evaporation rate	Comments: Data lacking.
Flammability	Data lacking.
Explosion limit	Comments: Data lacking.

Vapour pressure	Value: 2246 Pa Temperature: 20 °C
Vapour density	Comments: Data lacking.
Particle characteristics	Comments: Data lacking.
Relative density	Value: 1,536 Temperature: 20 °C
Density	Value: 1520 kg/m³ Temperature: 20 °C
Bulk density	Comments: Data lacking.
Solubility	Comments: Data lacking.
Partition coefficient: n-octanol/ water	Comments: Data lacking.
Auto-ignition temperature	Value: 400 °C
Decomposition temperature	Comments: Data lacking.
Viscosity	Value: > 20,5 mm2/s Temperature: 40 °C Type: Kinematic
Explosive properties	Data lacking.
Oxidising properties	Data lacking.

9.2. Other information

Physical hazards

Content of VOC	Value: 0 g/l

Other physical and chemical properties

Physical and chemical properties	No data recorded.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal conditions.

10.4. Conditions to avoid

Conditions to avoid	None known.

10.5. Incompatible materials

Materials to avoid	Avoid contact with oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products	When heated, vapours/gases hazardous to health may be formed. Carbon dioxide (CO2). Carbon monoxide (CO). Organic compounds.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	Effect tested: LD50 Route of exposure: Oral Value: 64 mg/kg Species: Rat Comments: CAS: 55965-84-9 Effect tested: LD50 Route of exposure: Dermal Value: 87,12 mg/kg Species: Rabbit Comments: CAS: 55965-84-9 Effect tested: LC50 Route of exposure: Inhalation. Duration: 4 hour(s) Value: 0,33 mg/l Species: Rat Comments: CAS: 55965-84-9 Effect tested: LD50 Route of exposure: Oral Value: > 2000 mg/kg Comments: CAS: 107-21-1 Effect tested: LD50 Route of exposure: Dermal Value: > 3500 mg/kg Species: Rabbit Comments: CAS: 107-21-1 Effect tested: LC50 Route of exposure: Inhalation. Value: > 20 mg/l Comments: CAS: 107-21-1 Effect tested: ATEmix calculated Route of exposure: Oral Value: > 2000 mg/kg Effect tested: ATEmix calculated Route of exposure: Dermal Value: > 2000 mg/kg

	Effect tested: ATEmix calculated Route of exposure: Inhalation. Duration: 4 hour(s) Value: > 20 mg/l

Other information regarding health hazards

Assessment of acute toxicity, classification	No specific health warnings noted.
Assessment of skin corrosion / irritation, classification	No specific health warnings noted.
Assessment of eye damage or irritation, classification	No specific health warnings noted.
Skin sensitisation, other information	EUH 208 Contains Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
Assessment of respiratory sensitisation, classification	No specific health warnings noted.
Assessment of skin sensitisation, classification	No specific health warnings noted.
Assessment of germ cell mutagenicity, classification	No specific health warnings noted.
Assessment of carcinogenicity, classification	No specific health warnings noted.
Assessment of reproductive toxicity, classification	No specific health warnings noted.
Assessment of specific target organ toxicity - single exposure, classification	No specific health warnings noted.
Assessment of specific target organ toxicity - repeated exposure, classification	No specific health warnings noted.
Assessment of aspiration hazard, classification	No specific health warnings noted.

Symptoms of exposure

In case of ingestion	No specific symptoms noted.
In case of skin contact	No specific symptoms noted.
In case of inhalation	No specific symptoms noted.
In case of eye contact	No specific symptoms noted.

11.2 Other information

Endocrine disruption	This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity, fish	Toxicity type: Acute Value: 53000 mg/l Effect dose concentration: LC50 Exposure time: 96 hour(s) Species: Pimephales promelas Comments: CAS: 107-21-1 Toxicity type: Acute Value: > 0,1 -1 mg/l Effect dose concentration: LC50 Exposure time: 96 hour(s) Comments: CAS: 55965-84-9
Aquatic toxicity, algae	Toxicity type: Acute Value: 24000 mg/l Effect dose concentration: EC50 Exposure time: 168 hour(s) Species: Selenastrum capricornutum Comments: CAS: 107-21-1 Toxicity type: Acute Value: > 0,1 -1 mg/l Effect dose concentration: EC50 Exposure time: 72 hour(s) Comments: CAS: 55965-84-9
Aquatic toxicity, crustacean	Toxicity type: Acute Value: 51000 mg/l Effect dose concentration: EC50 Exposure time: 48 hour(s) Species: Daphnia magna Comments: CAS: 107-21-1 Toxicity type: Acute Value: > 0,1 -1 mg/l Effect dose concentration: EC50 Exposure time: 48 hour(s) Comments: CAS: 55965-84-9
Ecotoxicity	Not classified as dangerous to the environment.

12.2. Persistence and degradability

Biodegradability	Value: 90 % Comments: CAS: 107-21-1
Chemical oxygen demand (COD)	Value: 1,29 Comments: CAS: 107-21-1 Concentration: 100 mg/l Test duration: 14 day(s)
Biological oxygen demand (BOD)	Value: 0,47 Comments: CAS: 107-21-1 Concentration: 100 mg/l Test duration: 14 day(s)

BOD5/COD ratio	Value: 0,36 Comments: CAS: 107-21-1

12.3. Bioaccumulative potential

Bioconcentration factor (BCF)	Value: 10 Comments: CAS: 107-21-1

12.4. Mobility in soil

Surface tension	Value: 0,04989 N/m Comments: CAS: 107-21-1 Temperature: 25 °C
Henry's constant	Value: 0,1327 Comments: CAS: 107-21-1

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	Not Classified as PBT/vPvB by current EU criteria.

12.6. Endocrine disrupting properties

Endocrine disrupting properties	This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Additional ecological information	No recommendation given.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Dispose of waste and residues in accordance with local authority requirements.
EWC waste code	EWC waste code: 080410 waste adhesives and sealants other than those mentioned in 08 04 09 Classified as hazardous waste: No

SECTION 14: Transport information

Dangerous goods	No

14.1. UN number

Comments	Not relevant.

14.2. UN proper shipping name

Comments	Not relevant.

14.3. Transport hazard class(es)

Comments	Not relevant.

14.4. Packing group

Comments	Not relevant.

14.5. Environmental hazards

Comments	Not relevant.

14.6. Special precautions for user

Special safety precautions for user	Not relevant.

14.7. Maritime transport in bulk according to IMO instruments

ICAO/IATA Other information

Other transport, general	Not relevant.

SECTION 15: Regulatory information

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

Nanomaterial	No
Legislation and regulations	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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (REACH). The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895).

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

Supplier's notes	The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

List of relevant H-phrases (Section 2 and 3)	EUH 071 Corrosive to the respiratory tract. H301 Toxic if swallowed. H302 Harmful if swallowed. H310 Fatal in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H373 May cause damage to organs through prolonged or repeated exposure H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
Key literature references and sources for data	MSDS supplied by the manufacturer
Information added, deleted or revised	Relevant changes compared to the previous version of the safety data sheet are indicated with verticle lines in the left margin.
Version	3
Prepared by	Amanda Öhman, Goodpoint AB