SAFETY DATA SHEET

Alfix M-Silicone

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

1.1. Product identifier

Trade name

Alfix M-Silicone

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

Relevant identified uses of the substance or mixture

Sealant

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Alfix A/S
H.C. Ørsteds Vej 11
DK-6000 Kolding
Denmark
Tel: +45 75 52 90 11

Contact person

Frank Pingel

E-mail

fp@alfix.dk

Revision

26/02/2024

SDS Version

4.0

1.4. Emergency telephone number

Contact the poison hotline: +45 82 12 12 12 (24 hour service)
See section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP).

2.2. Label elements

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Not applicable.

Precautionary statement(s)

General

-

Prevention

-

Response

-

Storage

-

Disposal

-

Hazardous substances

None known.

Additional labelling

EUH208, Contains Trimethoxyvinylsilane, 3-aminopropyltriethoxysilane. May produce an allergic reaction.
EUH210, Safety data sheet available on request.

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
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 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
3-Aminopropyl(methyl)silsesquioxane, ethoxy-terminated	CAS No.: 128446-60-6 EC No.: 603-274-5 REACH: Index No.:	1-3%	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318	
Trimethoxyvinylsilane	CAS No.: 2768-02-7 EC No.: 220-449-8 REACH: 01- 2119513215-52-XXXX Index No.: 014-049-00-0	<1%	Flam. Liq. 3, H226 Skin Sens. 1B, H317 Acute Tox. 4, H332	
3-aminopropyltriethoxysilane	CAS No.: 919-30-2 EC No.: 213-048-4 REACH: 01-2119480479-24-0001 Index No.: 612-108-00-0	<1%	Acute Tox. 4, H302 Skin Corr. 1B, H314 Skin Sens. 1B, H317 Eye Dam. 1, H318	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

-

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.
Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.
Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

Treat symptomatically.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the chemical emergency services on 72 85 20 00 (24 h service) in order to obtain further advice.
Fire fighters should wear appropriate personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, especially in confined areas.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

Dry, cool and well ventilated

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

methanol (released in small quantities during vulcanisation)
Long term exposure limit (8 hours) (mg/m³): 260
Long term exposure limit (8 hours) (ppm): 200
Short term exposure limit (15 minutes) (mg/m³): 520
Short term exposure limit (15 minutes) (ppm): 400
Annotations:
E = Substance has an EC limit.
H = The substance can be absorbed through the skin.

Ethanol (released in small quantities during vulcanisation)
Long term exposure limit (8 hours) (mg/m³): 1900
Long term exposure limit (8 hours) (ppm): 1000
Short term exposure limit (15 minutes) (mg/m³): 3800
Short term exposure limit (15 minutes) (ppm): 2000

Statutory order 202 on exposure limits for substances and mixtures (21/02/2023)

DNEL

Trimethoxyvinylsilane

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	630 µg/kgbw/day
Long term – Systemic effects - Workers	Dermal	910 µg/kgbw/day
Long term – Systemic effects - General population	Inhalation	6.8 mg/m³
Long term – Systemic effects - Workers	Inhalation	27.6 mg/m³
Short term – Systemic effects - General population	Inhalation	54.4 mg/m³
Short term – Systemic effects - Workers	Inhalation	73.6 mg/m³
Long term – Systemic effects - General population	Oral	630 µg/kgbw/day

P EC

Trimethoxyvinylsilane

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		400 µg/L
Freshwater sediment		1.5 mg/kg
Intermittent release (freshwater)		1.21 mg/L
Marine water		40 µg/L
Marine water sediment		150 µg/kg
Soil		60 µg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.
Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

In the event the work process is within scope of the Danish statutory order on work with code numbered products (Work Inspectorate Order no. 302/1993), then personal protection equipment shall be selected as set out herein. If applicable, please refer to the code number of this product in section 15.
Use only CE marked protective equipment.

Respiratory Equipment

Work situation	Type	Class	Colour	Standards	
If used in small and very badly ventilated rooms (not relevant if the room is well ventilated)	AX		Brown	EN14387	

Skin protection

No specific requirements.

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
When applying the sealant with a caulking gun and when finishing with a joint nail, work can be carried out without gloves if skin contact is avoided.				

Eye protection

No specific requirements.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Paste

Colour

Various colours

Odour / Odour threshold

Characteristic

pH

Testing not relevant or not possible due to the nature of the product.

Density (g/cm³)

1.25 (20 °C)

Kinematic viscosity

Testing not relevant or not possible due to the nature of the product.

Particle characteristics

Testing not relevant or not possible due to the nature of the product.

Phase changes

Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

Boiling point (°C)

Testing not relevant or not possible due to the nature of the product.

Vapour pressure

Testing not relevant or not possible due to the nature of the product.

Relative vapour density

Testing not relevant or not possible due to the nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

Testing not relevant or not possible due to the nature of the product.

Flammability (°C)

Testing not relevant or not possible due to the nature of the product.

Auto-ignition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

Solubility

Solubility in water

Insoluble

n-octanol/water coefficient (LogKow)

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

Other physical and chemical parameters

No data available.

Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	Trimethoxyvinylsilane
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	7100 mg/kg ·

Product/substance	Trimethoxyvinylsilane
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	3200 mg/kg ·

Product/substance	Trimethoxyvinylsilane
Species:	Rat
Route of exposure:	Inhalation
Test:	LD50

Result:	16,8 mg/l/4h ·

Skin corrosion/irritation

Product/substance	Trimethoxyvinylsilane
Species:	Rabbit
Duration:	96 hours
Result:	No adverse effect observed (Not irritating)

Serious eye damage/irritation

Not irritating (Rabbit); Method: OECD 405 (performed on comparable product)

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Product/substance	Trimethoxyvinylsilane
Test method:	OECD 406
Species:	Guinea pig
Result:	No adverse effect observed (not sensitising)
Other information:	Test system: Maximizing test

Product/substance	Trimethoxyvinylsilane
Test method:	OECD 406
Species:	Guinea pig
Result:	No adverse effect observed (not sensitising)
Other information:	Test system: Buehler Test

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

None known.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Trimethoxyvinylsilane
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	191 mg/l ·

Product/substance	Trimethoxyvinylsilane
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	169 mg/l ·

Product/substance	Trimethoxyvinylsilane
Species:	Daphnia

Duration:	21 days
Test:	NOEC
Result:	25 mg/l ·

Product/substance	Trimethoxyvinylsilane
Species:	Algae
Duration:	72 hours
Test:	NOEC
Result:	25 mg/l ·

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

Product/substance	Trimethoxyvinylsilane
Conclusion:	Not biodegradable

12.3. Bioaccumulative potential

Based on available data, the classification criteria are not met.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is not covered by regulations on dangerous waste.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

08 04 10	Waste adhesives and sealants other than those mentioned in 08 04 09

Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

No special.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

methanol (released in small quantities during vulcanisation)

REACH, Annex XVII

3-Aminopropyl(methyl)silsesquioxane, ethoxy-terminated is subject to REACH restrictions, REACH annex XVII (entry 40).
Trimethoxyvinylsilane is subject to REACH restrictions, REACH annex XVII (entry 40).
Ethanol (released in small quantities during vulcanisation) is subject to REACH restrictions, REACH annex XVII (entry 40).

Additional information

Code number (1993): 00-1.

Sources

Executive Order no. 372 of 25 April 2016 on control of the risk of major accidents with dangerous substances.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
Arbejdstilsynets bekendtgørelse nr. 301 af 13. maj 1993 om fastsættelse af kodenumre med senere ændringer.
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 (CLP).
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).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H226, Flammable liquid and vapour.
H302, Harmful if swallowed.
H314, Causes severe skin burns and eye damage.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H318, Causes serious eye damage.
H332, Harmful if inhaled.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

Not applicable.

The safety data sheet is validated by

Product Safety Department

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: DK-en