

SAFETY DATA SHEET

By Venø Construction adhesive

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

1.1. Product identifier

Trade name

By Venø Construction adhesive

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

Relevant identified uses of the substance or mixture

Construction adhesive for most building applications

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Dana Lim A/S

Københavnsvej 220

DK-4600 Køge

Denmark

Tel: +45 56 64 00 70

Contact person

Product Safety Department

E-mail

info@danalim.dk

Revision

3/21/2023

SDS Version

1.0

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.

Safety statement(s)

General

-

Prevention

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Response

. -

Storage

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Disposal

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Hazardous substances

None known.

Additional labelling

EUH208, Contains Trimethoxyvinylsilane. 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 considered to meet the criteria classifying them as PBT and/or vPvB.

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 |
|---|---|--------|---|----------|
| 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 | |
| Titanium dioxide | CAS No.: 13463-67-7 EC No.: 236-675-5 REACH: 01-2119489379-17-XXXX Index No.: | <1% | | |
| Methanol | CAS No.: 67-56-1 EC No.: 200-659-6 REACH: 01-2119433307-44 Index No.: 603-001-00-X | <1% | Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 STOT SE 2, H371 (SCL: 3.00 %) | [1], [3] |
| bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl) | CAS No.: 63843-89-0 EC No.: 264-513-3 REACH: 01-2119978231-37-XXXX Index No.: | <0.05% | Acute Tox. 4, H302 STOT RE 1, H372 Aquatic Chronic 1, H410 (M=10) | |
| Methanol (released in small quantities during vulcanisation) | CAS No.: 67-56-1 EC No.: 200-659-6 REACH: 01-2119433307-44 Index No.: 603-001-00-X | <0.05% | Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 STOT SE 2, H371 (SCL: 3.00 %) | [1], [3] |

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

Other information

[1] European occupational exposure limit.

[3] According to REACH, Annex XVII, the substance is subject to restrictions.

nano: nanoform

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.

Eve contact

Upon irritation of the eye: Remove contact lenses and open eyes widely. Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. 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

None known.

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.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO2)

Some metal oxides

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 45 90 60 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

No specific requirements.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

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

No specific requirements

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

Titanium dioxide

Long term exposure limit (8 hours) (mg/m³): 6 (som Ti)

Annotations:

K = Dusts that contain the substance on a respirable form are considered to be carcinogenic.

Methanol

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.

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.

Statutory order 1054 on exposure limits for substances and mixtures (28/06/2022)

Titanium dioxide is included in the national list of substances suspected of causing cancer

BEK nr 1795 af 18/12/2015 om foranstaltninger til forebyggelse af kræftrisikoen ved arbejde med stoffer og materialer.

DNEL

Titanium dioxide

| Duration: | Route of exposure: | DNEL: |
|--|----------------------------|------------------------------|
| Long term – Local effects - Workers | Inhalation | 10 mg/m³ |
| Long term – Systemic effects - General population | Oral | 700 mg/kg |
| Trimethoxyvinylsilane | | |
| _ | _ | |
| Duration: | Route of exposure: | DNEL: |
| Duration: Long term – Systemic effects - General population | Route of exposure: Dermal | DNEL: 630 μg/kgbw/day |
| | • | |
| Long term – Systemic effects - General population | Dermal | 630 μg/kgbw/day |

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

| 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 |

PNEC

Titanium dioxide

| Route of exposure: | Duration of Exposure: | PNEC: |
|------------------------|-----------------------|-------|
| Air | | |
| Freshwater | | |
| Freshwater sediment | | |
| Marine water | | |
| Marine water sediment | | |
| Predators | | |
| Sewage treatment plant | | |
| Soil | | |

Trimethoxyvinylsilane

| Thineerioxy viriy is notice | | |
|-----------------------------------|------------------------------|-----------|
| 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.

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. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Only CE-marked personal protection equipment should be used.

Use only CE marked protective equipment.

Respiratory Equipment

| copilatory Equipment | | | | | |
|--|------|-------|--------|-----------|--|
| Work situation | Туре | 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

| Material | Glove thickness (mm) | Breakthrough time (min.) | Standards | |
|----------|----------------------|-----------------------------|-------------------------|--|
| Nitrile | 0.4 | > 480 | EN374-2, EN374-3, EN388 | |

Eye protection

No specific requirements.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Paste

Colour

White

Odour / Odour threshold

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

рН

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

Density (q/cm³)

1.54-1.58

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

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

n-octanol/water coefficient

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

Solubility in fat (q/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.



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 ·

Product/substance Titanium dioxide

Species: Rat
Route of exposure: Oral
Test: LD50
Result: >10000 ·

Skin corrosion/irritation

Product/substance Trimethoxyvinylsilane

Species: Rabbit Duration: 96 hours

Result: No adverse effect observed (Not irritating)

Serious eye damage/irritation

Product/substance Trimethoxyvinylsilane

Species: Rabbit

Duration: No data available.

Result: Adverse effect observed (Irritating)

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)



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

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

Not applicable.

Other information

Titanium dioxide has been classified by IARC as a group 2B carcinogen.

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⋅

12.2. Persistence and degradability

Product/substance Trimethoxyvinylsilane

Biodegradable: No Test method:

Product/substance Titanium dioxide

Biodegradable:

Result:



Test method:

Result:

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

Not applicable.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

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

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

Methanol (released in small quantities during vulcanisation)

REACH, Annex XVII

Methanol is subject to REACH restrictions, REACH annex XVII (entry 69).

Methanol (released in small quantities during vulcanisation) is subject to REACH restrictions, REACH annex XVII (entry 69).

^{**} Environmental hazards



Additional information

Code number (1993): 0-1.

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

H225, Highly flammable liquid and vapour.

H226, Flammable liquid and vapour.

H301, Toxic if swallowed.

H302, Harmful if swallowed.

H311, Toxic in contact with skin.

H317, May cause an allergic skin reaction.

H331, Toxic if inhaled.

H332, Harmful if inhaled.

H370, Causes damage to organs.

H371, May cause damage to organs.

H372, Causes damage to organs through prolonged or repeated exposure.

H410, Very toxic to aquatic life with long lasting effects.

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

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

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