

SAFETY DATA SHEET

Combitack 547

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Trade name Combitack 547 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture Sealing and bonding 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 27/09/2023 SDS Version 2.0 Date of previous version 07/09/2023 (1.0) 1.4. Emergency telephone number Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures". SECTION 2: Hazards identification Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law. 2.1. Classification of the substance or mixture Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects. 2.2. Label elements Hazard pictogram(s) Not applicable. Signal word Not applicable. Hazard statement(s)

Harmful to aquatic life with long lasting effects. (H412)

Precautionary statement(s)

General

Prevention Avoid release to the environment. (P273) Response

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Storage
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Disposal

Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances

None known.

Additional labelling

EUH208, Contains Trimethoxyvinylsilane. May produce an allergic reaction.

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

3.2 VMixtures

Not applicable. This product is a mixture.

Product/substance	Identifiers	% w/w	Classification	Note
Trimethoxyvinylsilane	CAS No.: 2768-02-7 EC No.: 220-449-8 UK-REACH: Index No.: 014-049-00-0	<1%	Flam. Liq. 3, H226 Skin Sens. 1B, H317 Acute Tox. 4, H332	
Ethylenbis(oxyethylen)bis[3-(5- tert-butyl-4-hydroxy-m- tolyl)propionat]	CAS No.: 36443-68-2 EC No.: 253-039-2 UK-REACH: Index No.:	<0.25%	Aquatic Chronic 1, H410 (M=10)	

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

▼ Other information

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.

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.

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 National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

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

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

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

calcium carḃonate (Precipitated, PCC) (Nano) Long term exposure limit (8 hours) (mg/m³): 10(inhalable)/4(respirable)

magnesium carbonate Long term exposure limit (8 hours) (mg/m³): 10(inhalable)/4(respirable)

methanol (released in small quantities during vulcanisation) Long term exposure limit (8 hours) (ppm): 200 Long term exposure limit (8 hours) (mg/m³): 266 Short term exposure limit (15 minutes) (ppm): 250 Short term exposure limit (15 minutes) (mg/m³): 333 Annotations: Sk = Can be absorbed through the skin and lead to systemic toxicity.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002. EH40/2005 Workplace exposure limits (Fourth Edition 2020).

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/m ³
Long term – Systemic effects - Workers	Inhalation	27.6 mg/m ³
Short term – Systemic effects - General population	Inhalation	54.4 mg/m ³
Short term – Systemic effects - Workers	Inhalation	73.6 mg/m ³
Long term – Systemic effects - General population	Oral	630 µg/kgbw/day

PNEC

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. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory 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 requireme Hand protection	ents.				

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
	Nitrile	0.1	> 480	EN374-2, EN388	Mn

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

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9.1. Information on basic physical and chemical properties
  Physical state
      Paste
  Colour
      According to specification
  Odour / Odour threshold
      Faint
  рΗ
      Testing not relevant or not possible due to the nature of the product.
  Density (g/cm<sup>3</sup>)
      1,41-1,45 (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)
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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	
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 Species: Route of exposure: Test: Result:	Trimethoxyvinylsilane Rat Oral LD50 7100 mg/kg ·	
Product/substance Species: Route of exposure: Test: Result:	Trimethoxyvinylsilane Rabbit Dermal LD50 3200 mg/kg ·	
Product/substance Species: Route of exposure: Test: Result:	Trimethoxyvinylsilane Rat Inhalation LD50 16,8 mg/l/4h ·	



Product/substance Species: Route of exposure: Test: Result:	Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat] Rat Oral LD50 >2000 mg/kg ·
Product/substance Species: Route of exposure: Test: Result:	Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat] Rat Dermal LD50 >2000 mg/kg ·
kin corrosion/irritation Product/substance	Trimethoxyvinylsilane
Species: Duration: Result:	Rabbit 96 hours No adverse effect observed (Not irritating)
Product/substance Test method: Species:	Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat] OECD 404 Rabbit
Duration: Result:	No data available. No adverse effect observed (Not irritating)
erious eye damage/irrita	-
Product/substance Species:	Trimethoxyvinylsilane Rabbit
Duration:	No data available.
Result:	Adverse effect observed (Irritating)
Product/substance Test method: Species: Duration: Result:	Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat] OECD 404 Rabbit No data available. No adverse effect observed (Not irritating)
espiratory sensitisation Product/substance	Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat]
Species: Result:	Guinea pig No adverse effect observed (not sensitising)
kin sensitisation Product/substance	Trimethoxyvinylsilane
Test method:	OECD 406
Species: Result:	Guinea pig No adverse effect observed (not sensitising)
Other information:	Test system: Maximizing test
Product/substance Test method:	Trimethoxyvinylsilane OECD 406 Guiaga pig
Species: Result:	Guinea pig No adverse effect observed (not sensitising)
Other information:	Test system: Buehler Test
Product/substance Species:	Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat] Guinea pig
Result:	No adverse effect observed (not sensitising)
erm cell mutagenicity Product/substance	Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat]
Species:	

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 considered 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 ·
Product/substance	Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat]
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	43 mg/l ·
Harmful to aquatic li 12.2. Persistence and d Product/substance Biodegradable: Test method: Result:	fe with long lasting effects. egradability Trimethoxyvinylsilane No
Product/substance Biodegradable: Test method: Result:	Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat] No

12.3. Bioaccumulative potential

Product/substance Ethylenbis(oxyethylen)bis[3-(5-tert-butyl-4-hydroxy-m-tolyl)propionat] Test method:



Potential bioaccumulation:	No
LogPow:	No data available.
BCF:	No data available.
Other information:	

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

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 that are toxic to the environment. May result in adverse effects to aquatic organisms.

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 covered by the regulations on hazardous waste.

HP 14 – Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

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

Contaminated packing

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

SECTION 14: Transport information

	14.1 14.2 UN / ID UN proper shipping name	14.3 Hazard class(es)	14.4 14.5 Other PG* Env** 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.

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    SEVESO - Categories / dangerous substances
methanol (released in small quantities during vulcanisation)
    Additional information
Not applicable.
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Sources



Control of Major Accident Hazards (COMAH) Regulations 2015. Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law. 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. H317, May cause an allergic skin reaction. H332, Harmful if inhaled. 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 (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 The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law. ▼ 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: GB-en