SAFETY DATA SHEET

Syntoseal 548

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

1.1. Product identifier

Trade name

Syntoseal 548

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

Relevant identified uses of the substance or mixture

Sealant

Relevant identified uses of the substance or mixture (REACH)

No special

Uses advised against

No special

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
Fax: +45 56 64 00 90

Contact person

Product Safety Department

E-mail

info@danalim.dk

SDS date

2020-10-05

SDS Version

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

2.1. Classification of the substance or mixture

STOT RE 2; H373, May cause damage to organs through prolonged or repeated exposure¤.

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)

Signal word

Warning

Hazard statement(s)

May cause damage to organs through prolonged or repeated exposure¤.
Harmful to aquatic life with long lasting effects.

Safety statement(s)

General

P101, If medical advice is needed, have product container or label at hand.
P102, Keep out of reach of children.

Prevention

P273, Avoid release to the environment.
P260, Do not breathe vapour.

Response

P314, Get medical advice/attention if you feel unwell.

Storage

-

Disposal

P501, Dispose of contents/container to an approved waste disposal plant.

Hazardous substances

xylene
ethylbenzene
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol

2.3. Other hazards

Additional labelling

EUH208, Contains N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide), fatty acids, C6-C19 branched, cobalt (2+) salts. May produce an allergic reaction.

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.
Contains drying oils. Risk of self-ignition. After spills and used cloths, etc. have been recovered, store in fireproof waste disposal containers before destroying.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/Ingredient name	Identifiers	% w/w	Classification	Note
xylene	CAS No.: 1330-20-7 EC No.: 215-535-7 REACH No.: 01-2119488216-32-XXXX Index No.: 601-022-00-9	3-5%	STOT RE 2, H373 STOT SE 3, H335 Acute Tox. 4, H332 Eye Irrit. 2, H319 Skin Irrit. 2, H315 Acute Tox. 4, H312 Asp. Tox. 1, H304 Flam. Liq. 3, H226	EU
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	CAS No.: 64742-82-1 EC No.: 919-164-8 REACH No.: 01-2119473977-17 Index No.:	3-5%	Asp. Tox. 1, H304 STOT RE 1, H372 Aquatic Chronic 3, H412 EUH066	
ethylbenzene	CAS No.: 100-41-4 EC No.: 202-849-4	1-3%	Acute Tox. 4, H332 STOT RE 2, H373 Asp. Tox. 1, H304 Flam. Liq. 2, H225	EU

	REACH No.: 01-2119489370-35-XXXX Index No.: 601-023-00-4		
N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	CAS No.: 123-26-2 EC No.: 204-613-6 REACH No.: 01-2119978265-26-XX XX Index No.:	<1%	Aquatic Chronic 3, H412 Skin Sens. 1B, H317
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	CAS No.: 95-38-5 EC No.: 202-414-9 REACH No.: 01-2119777867-13-0000 Index No.:	<1%	Acute Tox. 4, H312 Acute Tox. 4, H332 Acute Tox. 4, H302 Aquatic Chronic 1, H410 (M=1) Aquatic Acute 1, H400 (M=10) STOT RE 2, H373 Skin Corr. 1B, H314
2-ethylhexanoic acid, zirconium salt	CAS No.: 22464-99-9 EC No.: 245-018-1 REACH No.: 01-2119979088-21 Index No.:	<1%	Repr. 2, H361 Acute Tox. 4, H332 (SCL: 4.30 mg/l)
fatty acids, C6-C19 branched, cobalt (2+) salts	CAS No.: 68409-81-4 EC No.: 270-066-5 REACH No.: Index No.:	<1%	Aquatic Chronic 2, H411 Repr. 2, H361f Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 Acute Tox. 4, H302

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

Other information

EU: European occupational exposure limit

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

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye 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

Provide plenty of water for the person to drink and stay with him/her. 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 victim 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

This product contains substances that may trigger an allergic reaction to predisposed persons.

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

Call a POISON CENTER/doctor if you feel unwell.

Information to medics

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbon dioxide, powder, water mist. 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).

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

Avoid direct contact with spilled substances.

Avoid inhalation of vapours from spilled material.

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

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on “Disposal considerations” in regard of handling of waste.

See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Because of the danger of self-ignition, any waste from the product, spray mist and soiled rags etc. are to be kept in a fire-proof place in air-tight containers, alternatively the waste is to be burned.

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

Avoid direct contact with the product.
Smoking, drinking and consumption of food is not allowed in the work area.
See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Fire class

Storage temperature

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

—
xylene
Long term exposure limit (8 hours): 50 ppm
Long term exposure limit (8 hours): 220 mg/m³
Short term exposure limit (15 minutes): 100 ppm
Short term exposure limit (15 minutes): 441 mg/m³
Annotations:
BMVG = Biological Monitoring Guidance Value exists
Sk = Can be absorbed through the skin and lead to systemic toxicity.

—
ethylbenzene
Long term exposure limit (8 hours): 100 ppm
Long term exposure limit (8 hours): 441 mg/m³
Short term exposure limit (15 minutes): 125 ppm
Short term exposure limit (15 minutes): 552 mg/m³
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

Product/Ingredient name	DNEL	Route of exposure	Duration
xylene	221 mg/m³	Inhalation	Long term – Systemic effects - Workers
xylene	442 mg/m³	Inhalation	Short term – Systemic effects - Workers
xylene	221 mg/m³	Inhalation	Long term – Local effects - Workers
xylene	442 mg/m³	Inhalation	Short term – Local effects - Workers
xylene	212 mg/kg bw/day	Dermal	Long term – Systemic

			effects - Workers
xylene	65.3 mg/m³	Inhalation	Long term – Systemic effects - General population
xylene	260 mg/m³	Inhalation	Short term – Systemic effects - General population
xylene	65.3 mg/m³	Inhalation	Long term – Local effects - General population
xylene	260 mg/m³	Inhalation	Short term – Local effects - General population
xylene	125 mg/kg bw/day	Dermal	Long term – Systemic effects - General population
2-ethylhexanoic acid, zirconium salt	32,97 mg/m3	Inhalation	Long term – Systemic effects - Workers
2-ethylhexanoic acid, zirconium salt	6,49 mg/kg bw/day	Dermal	Long term – Systemic effects - Workers
2-ethylhexanoic acid, zirconium salt	8,13 mg/m3	Inhalation	Long term – Systemic effects - General population
2-ethylhexanoic acid, zirconium salt	3,25 mg/kg bw/day	Dermal	Long term – Systemic effects - General population
2-ethylhexanoic acid, zirconium salt	4,51 mg/kg bw/day	Oral	Long term – Systemic effects - General population

PNEC

Product/Ingredient name	PNEC	Route of exposure	Duration of Exposure
xylene	327 µg/L	Freshwater	No data available
xylene	327 µg/L	Marine water	No data available
xylene	6.58 mg/L	Sewage Treatment Plant	No data available
xylene	12.46 mg/kg sediment dw	Freshwater sediment	No data available
xylene	12.46 mg/kg sediment dw	Marine water sediment	No data available
2-ethylhexanoic acid, zirconium salt	0,36 mg/l	Freshwater	No data available
2-ethylhexanoic acid, zirconium salt	0,036 mg/l	Marine water	No data available
2-ethylhexanoic acid, zirconium salt	71,7 mg/l	Sewage Treatment Plant	No data available
2-ethylhexanoic acid, zirconium salt	6,37 mg/kg dry weight	Freshwater sediment	No data available

2-ethylhexanoic acid, zirconium salt	0,637 mg/kg dry weight	Marine water sediment	No data available
2-ethylhexanoic acid, zirconium salt	1,06 mg/kg dry weight	Soil	No data available

8.2. Exposure controls

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

General recommendations

Smoking, eating and drinking are not allowed in the work premises

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

Airborne gas and dust concentrations 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 emergency eyewash and -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

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

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Work situation	Recommended Filter type	Class	Colour	Standards	
If used in small and very badly ventilated rooms (not relevant if the room is well ventilated)	A	Class 2 (medium capacity)	Brown	EN14387	

Skin protection

Work situation	Recommended	Type/Category	Standards	
	Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.	-	-	

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
	Nitrile	0.4	> 30	EN374-2, EN374-3, EN388	
	When applying the sealant with a caulking gun and when finishing				

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
	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

Form

Paste

Colour

Gray

Odour

Characteristic

Odour threshold (ppm)

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

pH

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

Density (g/cm³)

1.40

Viscosity

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

Phase changes

Melting point (°C)

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

Boiling point (°C)

135.00 °C

Vapour pressure

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

Vapour density

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

Decomposition temperature (°C)

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

Evaporation rate (n-butylacetate = 100)

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

Data on fire and explosion hazards

Flash point (°C)

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

Ignition (°C)

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

Auto flammability (°C)

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

Explosion limits (% v/v)

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

Explosive properties

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

Oxidizing properties

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

Solubility

Solubility in water
Insoluble
n-octanol/water coefficient
Testing not relevant or not possible due to nature of the product.
Solubility in fat (g/L)
Testing not relevant or not possible due to nature of the product.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available
10.2. Chemical stability
The product is stable under the conditions, noted in the section “Handling and storage”.
10.3. Possibility of hazardous reactions
No special
10.4. Conditions to avoid
No special
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 toxicological effects
Acute toxicity

Product/Ingredient name	Species	Test	Route of exposure	Result
xylene	Rat	LD50	Oral	>3900 mg/kg ·
xylene	Rat	LC50	Inhalation	20 mg/l 4h ·

Skin corrosion/irritation
Based on available data, the classification criteria are not met.
Serious eye damage/irritation
Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.
This product contains substances that may trigger an allergic reaction to predisposed persons.
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
May cause damage to organs through prolonged or repeated exposure¤.
Aspiration hazard
Based on available data, the classification criteria are not met.
Long term effects
No special
Other information

xylene has been classified by IARC as a group 3 carcinogen.
ethylbenzene has been classified by IARC as a group 2B carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Product/Ingredient name	Species	Test	Duration	Result
xylene	Fish	LC50	96 hours	2 mg/l ·
xylene	Daphnia	EC50	48 hours	8,5 mg/l ·
xylene	Algae	LC50	72 hours	3,2 mg/l ·
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Fish	LC50	96 hours	10-100 ·
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Daphnia	EC50	48 hours	>100 ·
2-ethylhexanoic acid, zirconium salt	Fish	LC50	96 hours	> 100 mg/l ·
2-ethylhexanoic acid, zirconium salt	Daphnia	NOEC	21 days	25 mg/l ·

12.2. Persistence and degradability

Product/Ingredient name	Biodegradability	Test	Result
xylene	Yes		

12.3. Bioaccumulative potential

Product/Ingredient name	Potential bioaccumulation	LogPow	BCF
xylene	No data available	3,1500	24.0000000

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. 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.

EWC code

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

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 - 14.4

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

Not applicable

IMDG

Not applicable

IATA

Not applicable

"MARINE POLLUTANT"

No

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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

No data available

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

No specific requirements

SEVESO - Categories / dangerous substances

Not applicable

Additional information

Tactile warning.

Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.
Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers.
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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).
Regulation (EC) 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H373, May cause damage to organs through prolonged or repeated exposure¤.
H335, May cause respiratory irritation.
H332, Harmful if inhaled.
H319, Causes serious eye irritation.
H315, Causes skin irritation.
H312, Harmful in contact with skin.

H304, May be fatal if swallowed and enters airways.
H226, Flammable liquid and vapour.
H372, Causes damage to organs through prolonged or repeated exposure¤.
H412, Harmful to aquatic life with long lasting effects.
EUH066, Repeated exposure may cause skin dryness or cracking.
H225, Highly flammable liquid and vapour.
H317, May cause an allergic skin reaction.
H302, Harmful if swallowed.
H410, Very toxic to aquatic life with long lasting effects.
H400, Very toxic to aquatic life.
H314, Causes severe skin burns and eye damage.
H361, Suspected of damaging fertility or the unborn child.
H411, Toxic to aquatic life with long lasting effects.
H361f, Suspected of damaging fertility.

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
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
UVCB = Complex hydrocarbon substance
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the substance/mixture is based on:
The classification of the substance/mixture in regard of health hazards are in accordance with the calculation

methods given by Regulation (EC) No. 1272/2008 (CLP)

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.