

SAFETY DATA SHEET

Construction Adhesive 293

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

1.1. Product identifier

Trade name

Construction Adhesive 293

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

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

2020-08-17

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

Flam. Liq. 2; H225, Highly flammable liquid and vapour.

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT SE 3; H336, May cause drowsiness or dizziness.

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

2.2. Label elements

Hazard pictogram(s)







Signal word

Danger

Hazard statement(s)

Highly flammable liquid and vapour.

Causes serious eye irritation.

May cause drowsiness or dizziness.

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

P271, Use only outdoors or in a well-ventilated area.

P210, Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280, Wear eye protection.

Response

Storage

P403+P233, Store in a well-ventilated place. Keep container tightly closed.

Disposal

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

Hazardous substances

ethyl acetate

xylene

2.3. Other hazards

Additional labelling

EUH066, Repeated exposure may cause skin dryness or cracking.

EUH208, Contains N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide). 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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/Ingredient name	Identifiers	% w/w	Classification	Note
ethyl acetate	CAS No.: 141-78-6	25-40%	STOT SE 3, H336 Eye Irrit. 2, H319	EU
	EC No.: 205-500-4		Flam. Liq. 2, H225	
	REACH No.: 01-		EUH066	
	2119475103-46-XXXX			
	Index No.: 607-022-00-5			
xylene	CAS No.: 1330-20-7	5-10%	STOT RE 2, H373 STOT SE 3, H335	EU
	EC No.: 215-535-7		Acute Tox. 4, H332	
	REACH No.: 01-		Eye Irrit. 2, H319	
	2119488216-32-XXXX		Skin Irrit. 2, H315 Acute Tox. 4, H312	
	Index No.: 601-022-00-9		Asp. Tox. 1, H304 Flam. Liq. 3, H226	



ethylbenzene	CAS No.: 100-41-4	1-3%	Acute Tox. 4, H332 STOT RE 2, H373	EU
	EC No.: 202-849-4		Asp. Tox. 1, H304	
	REACH No.: 01-		Flam. Liq. 2, H225	
	2119489370-35-XXXX			
	Index No.: 601-023-00-4			
cyclohexane	CAS No.: 110-82-7	1-3%	Aquatic Chronic 1, H410 (M=1)	Annex
	EC No.: 203-806-2		Aquatic Acute 1, H400 (M=1) STOT SE 3, H336	XVII, EU
			Skin Irrit. 2, H315	
	REACH No.: 01- 2119463273-41-XXX		Asp. Tox. 1, H304	
	2119403273-41-XXX		Flam. Liq. 2, H225	
	Index No.: 601-017-00-1			
N,N'-ethane-1,2-	CAS No.: 123-26-2	<1%	Aquatic Chronic 3, H412	
diylbis(12-	EC No.: 204-613-6		Skin Sens. 1B, H317	
hydroxyoctadecan-1- amide)	EC No.: 204-613-6			
	REACH No.: 01-			
	2119978265-26-XX XX			
	Index No.:			

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

Annex XVII: The chemical substance is subject to REACH restrictions, REACH annex XVII.

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. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. 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

Rinse with water until pain stops then continue to rinse for 30 minutes.



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

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned:

Get immediate medical advice/attention.

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 / CO []).

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

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

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

Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.



Avoid static electricity.

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 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.

Storage temperature

No specific requirements

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

ethyl acetate

Long term exposure limit (8 hours): 200 ppm

Short term exposure limit (15 minutes): 400 ppm

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.

cyclohexane

Long term exposure limit (8 hours): 100 ppm

Long term exposure limit (8 hours): 350 mg/m³

Short term exposure limit (15 minutes): 300 ppm

Short term exposure limit (15 minutes): 1050 mg/m³

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

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

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

No specific requirements

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	
In case of insuficient ventilation	Α	Class 2 (medium capacity)	Brown EN14387	

Skin protection

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

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
	4H	0,068 - 0,084	>480	EN374-2, EN374-3, EN388	
	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				

Eye protection

Work situation	Recommended	Standards	
	Wear safety glasses with side shields.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form

Paste

Colour

Beige, sand

Odour

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

avoided.

Odour threshold (ppm)

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

рΗ

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

Density (g/cm³)



1.20

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)

80.00 °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)

-4.00 °C

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

Soluble

n-octanol/water coefficient

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

Solubility in fat (q/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

Avoid static electricity.

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
ethyl acetate	Rat	LD50	Oral	5600 mg/kg ·
ethyl acetate	Rat	LC50	Inhalation	56000 mg/l/4h ·
xylene	Rat	LD50	Oral	>3900 mg/kg ·
xylene	Rat	LC50	Inhalation	20 mg/l 4h ·
cyclohexane	Rat	LD50	Oral	5000 mg/kg ·

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye irritation.

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

May cause drowsiness or dizziness.

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.

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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
ethyl acetate	Fish	LC50	96 hours	>200 mg/l ·
ethyl acetate	Daphnia	EC50	48 hours	>700 mg/l ·
ethyl acetate	Algae	IC50	72 hours	>100 mg/l ·



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 ·
cyclohexane	Daphnia	EC50	48 hours	0,9 mg/l ·

12.2. Persistence and degradability

Product/Ingredient name	Biodegradability	Test	Result
ethyl acetate	Yes		
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

This product is within scope of the regulations of transport of dangerous goods.

ADR/RID

UN no.	Proper Shipping Name	Class	PG	Tunnel restriction code
1133	ADHESIVES	3	II	2 (D/E)

IMDG

UN no.	Proper Shipping Name	Class	PG	EmS	
1133	ADHESIVES	3	II	F-E, S-D	



IATA

UN no.	Proper Shipping Name	Class	PG
1133	ADHESIVES	3	II

"MARINE POLLUTANT"

Nο

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

P5c

Additional information

Tactile warning.

Sources

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. The Control of Major Accident Hazards (COMAH) Regulations 2015.

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

Nο

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H336, May cause drowsiness or dizziness.

H319, Causes serious eye irritation.

H225, Highly flammable liquid and vapour.

EUH066, Repeated exposure may cause skin dryness or cracking.

H373, May cause damage to organs through prolonged or repeated exposure¤.

H335, May cause respiratory irritation.

H332, Harmful if inhaled.

H315, Causes skin irritation.

H312, Harmful in contact with skin.

H304, May be fatal if swallowed and enters airways.

H226, Flammable liquid and vapour.

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

H400, Very toxic to aquatic life.

H412, Harmful to aquatic life with long lasting effects.



H317, May cause an allergic skin reaction.

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

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 mixture is based on:

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The classification of the mixture in regard of physical hazards has been based on experimental data.

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.