

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Contact Adhesive 281

Product no.

-

REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture

Contact gluing

Uses advised against

-

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

Dana Lim A/S
Københavnsvej 220
DK-4600 Køge
Denmark
phone: +45 56 64 00 70
fax: +45 56 64 00 90

Contact person

Product Safety Department

E-mail

info@danalim.dk

SDS date

2020-07-17

SDS Version

10.0

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
Skin Irrit. 2; H315
Eye Irrit. 2; H319
STOT SE 3; H335
STOT SE 3; H336
STOT RE 2; H373
Aquatic Chronic 2; H411
See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)



▼ Signal word

Danger

Hazard statement(s)

Highly flammable liquid and vapour. (H225)
 Causes skin irritation. (H315)
 Causes serious eye irritation. (H319)
 May cause respiratory irritation. (H335)
 May cause drowsiness or dizziness. (H336)
 May cause damage to organs through prolonged or repeated exposure. (H373)
 Toxic to aquatic life with long lasting effects. (H411)

Precautionary statements

General	If medical advice is needed, have product container or label at hand. (P101). Keep out of reach of children. (P102).
Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210). Use only outdoors or in a well-ventilated area. (P271).
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).
Storage	Store in a well-ventilated place. Keep container tightly closed. (P403+P233).
Disposal	-

▼ Identity of the substances primarily responsible for the major health hazards

ethyl acetate; xylene; Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Additional labelling

Contains Colophony, disulfiram. May produce an allergic reaction. (EUH208).

Unique formula identifier (UFI)

-

2.3. Other hazards

This product contains substances that may cause adverse effects to the reproductive system.
 This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

Additional warnings

Tactile warning.

VOC (volatile organic compound)

Not applicable

SECTION 3: Composition/information on ingredients

▼ 3.1/3.2. Substances/Mixtures

NAME:	ethyl acetate
IDENTIFICATION NOS.:	CAS-no: 141-78-6 EC-no: 205-500-4 REACH-no: 01-2119475103-46-XXXX Index-no: 607-022-
00-5	
CONTENT:	25-40%
CLP CLASSIFICATION:	Flam. Liq. 2, STOT SE 3, Eye Irrit. 2 H225, H319, H336, EUH066
NOTE:	O L
NAME:	xylene
IDENTIFICATION NOS.:	CAS-no: 1330-20-7 EC-no: 215-535-7 REACH-no: 01-2119488216-32-XXXX Index-no: 601-022-
00-9	
CONTENT:	15 - <25%
CLP CLASSIFICATION:	Flam. Liq. 3, Asp. Tox. 1, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Acute Tox. 4, STOT SE 3, STOT RE 2 H226, H304, H312, H315, H319, H332, H335, H373

According to EC-Regulation 2015/830

NOTE:	O L
NAME:	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
IDENTIFICATION NOS.:	EC-no: 927-510-4 REACH-no: 01-2119475515-33-XXXX
CONTENT:	15 - <25%
CLP CLASSIFICATION:	Flam. Liq. 2, Acute Tox. 4, Asp. Tox. 1, Skin Irrit. 2, STOT SE 3, Aquatic Chronic 2 H225, H302, H304, H315, H336, H411
NAME:	ethylbenzene
IDENTIFICATION NOS.:	CAS-no: 100-41-4 EC-no: 202-849-4 REACH-no: 01-2119489370-35-XXXX Index-no: 601-023-00-4
CONTENT:	5 - <10%
CLP CLASSIFICATION:	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1 H225, H304, H332, H373
NOTE:	O L
NAME:	zinc oxide
IDENTIFICATION NOS.:	CAS-no: 1314-13-2 EC-no: 215-222-5 REACH-no: 01-2119463881-32 Index-no: 030-013-00-7
CONTENT:	0.25 - <1%
CLP CLASSIFICATION:	Aquatic Acute 1, Aquatic Chronic 1 H400, H410 (M-acute = 1) (M-chronic = 1)
NAME:	Colophony
IDENTIFICATION NOS.:	CAS-no: 8050-09-7 EC-no: 232-475-7 Index-no: 650-015-00-7
CONTENT:	0.25 - <1%
CLP CLASSIFICATION:	Skin Sens. 1 H317
NAME:	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol
IDENTIFICATION NOS.:	CAS-no: 119-47-1 EC-no: 204-327-1
CONTENT:	0.25 - <1%
CLP CLASSIFICATION:	Repr. 2, Aquatic Chronic 4 H361f, H413
NAME:	disulfiram
IDENTIFICATION NOS.:	CAS-no: 97-77-8 EC-no: 202-607-8
CONTENT:	0.25 - <1%
CLP CLASSIFICATION:	Acute Tox. 4, Skin Sens. 1, Acute Tox. 4, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1 H302, H317, H332, H373, H400, H410 (M-acute = 10) (M-chronic = 10)

(*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.
O = Organic solvent L = European occupational exposure limit.

Other information

ATEmix(inhale, vapour) > 20
ATEmix(inhale, dust/mist) > 5
ATEmix(inhale, gas) > 20000
ATEmix(dermal) > 2000
ATEmix(oral) > 2000
Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 3,9888 - 5,9832
Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 3,5808 - 5,3712
N chronic (CAT 2) Sum = Sum(Ci/(M(chronic)*25)*0.1*10^CATi) = 1,72000448 - 2,58000672
N acute (CAT 1) Sum = Sum(Ci/M(acute)*25) = 0,104141248 - 0,156211872

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.
The doctor can contact The National Poisons Information Service: Dial 0344 892 0111 (24 h service).
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

Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at

least 15 minutes and continue until irritation stops. Make sure to flush under the 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 the pain stops then continue to rinse for a further 30 minutes.

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

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.

Under normal circumstances no known risks. 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.

Symptoms may include reddening of the skin and rash, which typically occur after 12-72 hours.

This product contains substances, which may cause irritation upon exposure to skin. Symptoms may include reddening or dry, scaly skin.

This product contains substances, which causes irritation of the eyes. Typical symptoms of eye irritation may include itchy eyes, eye redness or excessive tearing.

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

Nothing special

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Some metal oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The 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 inhalation of vapours from spilled material. Avoid direct contact with spilled substances. Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment.

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

Avoid static electricity. 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. Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

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

Protect from heat/overheating.

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

OEL

ethylbenzene

Long-term exposure limit (8-hour TWA reference period): 100 ppm | 441 mg/m³

Short-term exposure limit (15-minute reference period): 125 ppm | 552 mg/m³

Comments: Sk (Sk = Can be absorbed through skin.)

xylene

Long-term exposure limit (8-hour TWA reference period): 50 ppm | 220 mg/m³

Short-term exposure limit (15-minute reference period): 100 ppm | 441 mg/m³

Comments: Sk BMGV (Bmgv = Biological Monitoring Guidance Value. Sk = Can be absorbed through skin.)

ethyl acetate

Long-term exposure limit (8-hour TWA reference period): 200 ppm | - mg/m³

Short-term exposure limit (15-minute reference period): 400 ppm | - mg/m³

DNEL / PNEC

No data available

8.2. Exposure controls

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

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

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 an 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 containment 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

Recommended: A. Class 2 (medium capacity). Brown

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

Hand protection

Nitrile rubber

Material thickness: 0,5 mm mm.

Breakthrough time: > 30 minutes (Class 2)

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Yellow
Odour	No data available.
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm ³)	0,87

Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	104
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.

Data on fire and explosion hazards

Flash point (°C)	7
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.

Solubility

Solubility in water	Insoluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	No data available.
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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

Nothing special

10.4. Conditions to avoid

Avoid static electricity.

According to EC-Regulation 2015/830

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

Substance: 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol

Species: Rat

Test: LD50

Route of exposure: Oral

Result: >10000mg/kg

Substance: zinc oxide

Species: Rat

Test: LC50

Route of exposure: Inhalation

Result: 2500 mg/min

Substance: zinc oxide

Species: Rat

Test: LD50

Route of exposure: Oral

Result: 7950 mg/kg

Substance: xylene

Species: Rat

Test: LD50

Route of exposure: Oral

Result: >3900 mg/kg

Substance: xylene

Species: Rat

Test: LC50

Route of exposure: Inhalation

Result: 20 mg/l 4h

Substance: ethyl acetate

Species: Rat

Test: LD50

Route of exposure: Oral

Result: 5600 mg/kg

Substance: ethyl acetate

Species: Rat

Test: LC50

Route of exposure: Inhalation

Result: 56000 mg/l/4h

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Under normal circumstances no known risks. This product contains substances that may trigger an allergic reaction to predisposed persons.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

May cause respiratory irritation. May cause drowsiness or dizziness.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available.

Long term effects

Reproductive toxicity: This product contains reprotoxic substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective fertility and dysfunctional menstrual cycle.

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.

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.

SECTION 12: Ecological information

▼ 12.1. Toxicity

Substance: 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol
Species: Fish
Test: LC50
Duration: 96h
Result: >50mg/l

Substance: zinc oxide
Species: Daphnia
Test: EC50
Duration: 48 h
Result: >1000 mg/l

Substance: zinc oxide
Species: Fish
Test: LC50
Duration: 96 h
Result: 1,1 mg/l

Substance: zinc oxide
Species: Algae
Test: EC50
Duration: 72 h
Result: 0,17 mg/l

Substance: xylene
Species: Fish
Test: LC50
Duration: 96 h
Result: 2 mg/l

Substance: xylene
Species: Daphnia
Test: EC50
Duration: 48 h
Result: 8,5 mg/l

Substance: xylene
Species: Algae
Test: LC50
Duration: 72 h
Result: 3,2 mg/l

Substance: ethyl acetate
Species: Fish
Test: LC50
Duration: 96 h
Result: >200 mg/l

Substance: ethyl acetate
Species: Daphnia
Test: EC50
Duration: 48 h

According to EC-Regulation 2015/830

Result: >700 mg/l

Substance: ethyl acetate

Species: Algae

Test: IC50

Duration: 72 h

Result: >100 mg/l

▼ 12.2. Persistence and degradability

Substance

xylene

ethyl acetate

Biodegradability

Yes

Yes

Test

No data available

No data available

Result

No data available

No data available

12.3. Bioaccumulative potential

Substance

No data available.

Potential bioaccumulation

LogPow

BCF

12.4. Mobility in soil

xylene: Log Koc= 2,572885, Calculated from LogPow (Moderate mobility potential.).

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.

Waste

EWC code

08 04 09

waste adhesives and sealants containing organic solvents or other dangerous substances

Specific labelling

Not applicable

Contaminated packing

Contaminated packaging 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

14.1. UN number

1133

14.2. UN proper shipping name

ADHESIVES containing flammable liquid

14.3. Transport hazard class(es)

3

14.4. Packing group

II

Notes

-

Tunnel restriction code

D/E

IMDG

UN-no.

1133

Proper Shipping Name

Adhesives, containing flammable liquid

Class

3

PG*

II

EmS

F-E, S-D

MP**

-

Hazardous constituent

-

IATA/ICAO

UN-no.

1133

Proper Shipping Name

Adhesives, containing flammable liquid

According to EC-Regulation 2015/830

Class	3
PG*	II

14.5. Environmental hazards

-

14.6. Special precautions for user

-

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

No data available

(*) Packing group

(**) Marine pollutant

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 cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

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

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Additional information

Not applicable

Seveso

Seveso III Part 1: P5c, E2

Biocidal reg. no.

Not applicable

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.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

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).

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

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.

H302 - Harmful if swallowed.

H304 - May be fatal if swallowed and enters airways.

H312 - Harmful in contact with skin.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

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

According to EC-Regulation 2015/830

H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.
H411 - Toxic to aquatic life with long lasting effects.
H413 - May cause long lasting harmful effects to aquatic life.
EUH066 - Repeated exposure may cause skin dryness or cracking.
H361f - Suspected of damaging fertility.

The full text of identified uses as mentioned in section 1

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Additional label elements

Not applicable

Other

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 physical hazards has been based on experimental data.

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 environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

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.

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.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

Robert Pedersen

**Date of last essential change
(First cipher in SDS version)**

2020-02-07(9.0)

**Date of last minor change
(Last cipher in SDS version)**

2020-02-07