

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Transparent Contact Adhesive 284

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

2018-08-17

SDS Version

5.0

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. 3; H226

Eye Irrit. 2; H319

STOT SE 3; H336

See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)



Signal word

Warning

According to EC-Regulation 2015/830

Hazard statement(s)

Flammable liquid and vapour. (H226)
 Causes serious eye irritation. (H319)
 May cause drowsiness or dizziness. (H336)

Safety statement(s)

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 -
Disposal Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

ethyl acetate, acetone

2.3. Other hazards

This product contains teratogenic substances, which may cause long-term adverse effects to the unborn foetus.

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 labelling

Repeated exposure may cause skin dryness or cracking. (EUH066)

Additional warnings

Not applicable

VOC

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:	60-80%
CLP CLASSIFICATION:	Flam. Liq. 2, STOT SE 3, Eye Irrit. 2 H225, H319, H336, EUH066
NOTE:	S
NAME:	acetone
IDENTIFICATION NOS.:	CAS-no: 67-64-1 EC-no: 200-662-2 REACH-no: 01-2119471330-49-xxxx Index-no: 606-001-00-8
CONTENT:	10 - <15%
CLP CLASSIFICATION:	Flam. Liq. 2, STOT SE 3, Eye Irrit. 2 H225, H319, H336, EUH066
NOTE:	SL
NAME:	toluene
IDENTIFICATION NOS.:	CAS-no: 108-88-3 EC-no: 203-625-9 Index-no: 601-021-00-3
CONTENT:	0.1 - <0.25%
CLP CLASSIFICATION:	Flam. Liq. 2, Asp. Tox. 1, Skin Irrit. 2, STOT SE 3, Repr. 2, STOT RE 2, Aquatic Chronic 3 H225, H304, H315, H336, H361d, H373, H412
NOTE:	SL

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

Other information

Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 6,2384 - 9,3576

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 111, 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.

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.

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

6.2. Environmental precautions

No specific requirements.

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. 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

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

toluene

Long-term exposure limit (8-hour TWA reference period): 50 ppm | 191 mg/m³

Short-term exposure limit (15-minute reference period): 100 ppm | 384 mg/m³

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

acetone

Long-term exposure limit (8-hour TWA reference period): 500 ppm | 1210 mg/m³

Short-term exposure limit (15-minute reference period): 1500 ppm | 3620 mg/m³

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

DNEL (acetone): 200 mg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects

Remarks: Forbruger

DNEL (acetone): 62 mg/kg/day

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects

Remarks: Forbruger

DNEL (acetone): 62 mg/kg/day

Exposure: Oral

Duration of Exposure: Long term – Systemic effects

Remarks: Forbruger

DNEL (acetone): 1210 mg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects

Remarks: Arbejdstager

DNEL (acetone): 186 mg/kg/day

According to EC-Regulation 2015/830

Exposure: Dermal
Duration of Exposure: Long term – Systemic effects
Remarks: Arbejdstager

DNEL (acetone): 2420 mg/m³
Exposure: Inhalation
Duration of Exposure: Short term – Local effects
Remarks: Arbejdstager

PNEC (acetone): 29,5 mg/kg
Exposure: Soil

PNEC (acetone): 10,6 mg/l
Exposure: Freshwater

PNEC (acetone): 1,06 mg/l
Exposure: Marine water

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

No specific requirements.

Individual protection measures, such as personal protective equipment



Generally

Use only CE marked protective equipment.

Respiratory Equipment

Recommended: AX. Brown

Use suitable respiratory protective device in case of insufficient ventilation.

Skin protection

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

Hand protection

Recommended: Nitrile rubber. Discard immediately after use

Material thickness: >0,3 mm.

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

Clear

Odour	Characteristic
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm ³)	0,9
Phase changes	
Melting point (°C)	No data available.
Boiling point (°C)	No data available.
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)	20
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.

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. Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

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: acetone

Species: Rabbit

Test: LD50

Route of exposure: Dermal

Result: >7400 mg/kg

Substance: acetone

Species: Rat

Test: LD50

Route of exposure: Oral

Result: 5800 mg/kg

Substance: acetone

Species: Rat

Test: LC50

Route of exposure: Inhalation

Result: 32 mg/l

Substance: ethyl acetate

According to EC-Regulation 2015/830

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

No data available.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Long term effects

Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders.

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: acetone
Species: Algae
Test: NOEC
Duration: 96 h
Result: 7000 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
Result: >700 mg/l

Substance: ethyl acetate
Species: Algae
Test: IC50
Duration: 72 h

According to EC-Regulation 2015/830

Result: >100 mg/l

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
acetone	Yes	No data available	No data available
ethyl acetate	Yes	No data available	No data available

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
acetone	No	No data available	No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

This product contains substances, which due to poor biodegradability, 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
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Specific labelling

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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 (vapor pressure at 50 ° C of not more than 110 kPa)
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 (vapor pressure at 50 ° C of not more than 110 kPa)
Class	3
PG*	II
EmS	F-E, S-D
MP**	No
Hazardous constituent	-

IATA/ICAO

UN-no.	1133
Proper Shipping Name	ADHESIVES containing flammable liquid (vapor pressure at 50 ° C of not more than 110 kPa)
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

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).

EC regulation 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.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

H373 - May cause 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.

H361d - Suspected of damaging the unborn child.

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

According to EC-Regulation 2015/830

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)

2018-01-04(4.0)

Date of last minor change

(Last cipher in SDS version)

2018-01-04