SAFETY DATA SHEET

Transparent Contact Adhesive 284

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

1.1. Product identifier

Trade name

Transparent Contact Adhesive 284

Unique formula identifier (UFI)

CGV0-D046-F007-HSA1

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

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

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

Contact person

Product Safety Department

E-mail

info@danalim.dk

Revision

19/12/2022

SDS Version

3.0

Date of previous version

06/10/2022 (2.0)

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, Flammable liquid and vapour.
Eye Irrit. 2; H319, Causes serious eye irritation.
STOT SE 3; H336, May cause drowsiness or dizziness.

2.2. Label elements

Hazard pictogram(s)

Signal word

Warning

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)
Wear eye protection/protective gloves. (P280)

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)
If eye irritation persists: Get medical advice/attention. (P337+P313)

Storage

-

▼Disposal

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

Hazardous substances

ethyl acetate
acetone

▼Additional labelling

EUH066, Repeated exposure may cause skin dryness or cracking.
UFI: CGV0-D046-F007-HSA1

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. ▼Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
ethyl acetate	CAS No.: 141-78-6 EC No.: 205-500-4 UK-REACH: Index No.: 607-022-00-5	60-80%	EUH066 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]
acetone	CAS No.: 67-64-1 EC No.: 200-662-2 UK-REACH: Index No.: 606-001-00-8	10-15%	EUH066 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]
toluene	CAS No.: 108-88-3 EC No.: 203-625-9 UK-REACH: Index No.: 601-021-00-3	<1%	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Repr. 2, H361d STOT RE 2, H373	[1], [3]

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

Other information

[1] European occupational exposure limit.
[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.
Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

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 person 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

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 eye irritation persists: Get 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

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Carbon oxides (CO / CO2)

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.

6.3. Methods and material for containment and cleaning up

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ground and bond container and receiving equipment.
Use explosion-proof [electrical/lighting/ventilating] equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Take action to prevent static discharges.
Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

Dry, cool and well ventilated

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. ▼Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethyl acetate
Long term exposure limit (8 hours) (ppm): 200
Short term exposure limit (15 minutes) (ppm): 400

acetone
Long term exposure limit (8 hours) (ppm): 500
Long term exposure limit (8 hours) (mg/m³): 1210
Short term exposure limit (15 minutes) (ppm): 1500
Short term exposure limit (15 minutes) (mg/m³): 3620

toluene
Long term exposure limit (8 hours) (ppm): 50
Long term exposure limit (8 hours) (mg/m³): 191
Short term exposure limit (15 minutes) (ppm): 100
Short term exposure limit (15 minutes) (mg/m³): 384
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

acetone

Duration	Route of exposure	DNEL
Long term – Systemic effects - General population	Dermal	62 mg/kg/day
Long term – Systemic effects - Workers	Dermal	186 mg/kg/day
Long term – Systemic effects - General population	Inhalation	200 mg/m3
Long term – Systemic effects - Workers	Inhalation	1.210 mg/m3

Short term – Local effects - Workers	Inhalation	2.420 mg/m3
Long term – Systemic effects - General population	Oral	62 mg/kg/day

toluene

Duration	Route of exposure	DNEL
Long term – Systemic effects - Workers	Dermal	384 mg/kg bw/day
Long term – Systemic effects - Workers	Inhalation	192 mg/m³
Short term – Local effects - Workers	Inhalation	384 mg/m³

PNEC

acetone

Route of exposure	Duration of Exposure	PNEC
Freshwater		10,6 mg/l
Freshwater sediment		3,04 mg/kg
Marine water		1,06 mg/l
Sewage treatment plant		29,5 mg/kg
Soil		33,3 mg/l
Water		21 mg/l

toluene

Route of exposure	Duration of Exposure	PNEC
Freshwater		0,68 mg/L
Freshwater sediment		16.39 mg/kg
Marine water		0,68 mg/L
Sewage treatment plant		13,61 mg/L
Soil		2,89 mg/kg

8.2. ▼Exposure controls

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

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

▼Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

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.

8.3. Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

Work situation	Type	Class	Colour	Standards
In case of insufficient ventilation	AX		Brown	EN14387

Skin protection

Recommended	Type/Category	Standards
Dedicated work clothing should be worn.	-	-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0,3	> 480	EN374-2, EN374-3, EN388

Eye protection

Type	Standards
Wear safety glasses with side shields.	EN166

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Liquid

Colour
Clear

Odour / Odour threshold
Characteristic

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

Density (g/cm³)
0.9

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

Particle characteristics
Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)
Testing not relevant or not possible due to the nature of the product.

Softening point/range (waxes and pastes) (°C)
Does not apply to liquids.

Boiling point (°C)
Testing not relevant or not possible due to the nature of the product.

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

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

Decomposition temperature (°C)
Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)
20

Auto-Ignition (°C)
Testing not relevant or not possible due to the nature of the product.

Flammability (°C)
Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)
Testing not relevant or not possible due to the nature of the product.

Solubility

Solubility in water

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

n-octanol/water coefficient

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

Solubility in fat (g/L)

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

9.2. Other information

Other physical and chemical parameters

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/substance	ethyl acetate
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	5600 mg/kg ·
Other information	

Product/substance	ethyl acetate
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	56000 mg/l/4h ·
Other information	

Product/substance	acetone
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	5800 mg/kg ·
Other information	

Product/substance	acetone
Test method	
Species	Rabbit
Route of exposure	Dermal
Test	LD50
Result	>7.400 mg/kg ·
Other information	

Product/substance	acetone
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	32 mg/l ·
Other information	

Product/substance	acetone
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	15.800 ·
Other information	

Product/substance	acetone
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	76 ·
Other information	

Skin corrosion/irritation
Based on available data, the classification criteria are not met.

Serious eye damage/irritation
Causes serious eye irritation.

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

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

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.

11.2. Information on other hazards

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.

Endocrine disrupting properties
None known.

Other information
toluene has been classified by IARC as a group 3 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	ethyl acetate

Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	>200 mg/l ·
Other information	

Product/substance	ethyl acetate
Test method	
Species	Daphnia
Compartment	
Duration	48 hours
Test	EC50
Result	>700 mg/l ·
Other information	

Product/substance	ethyl acetate
Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	IC50
Result	>100 mg/l ·
Other information	

Product/substance	acetone
Test method	
Species	Algae
Compartment	
Duration	96 hours
Test	NOEC
Result	7.000 mg/l ·
Other information	

Product/substance	acetone
Test method	
Species	Daphnia
Compartment	
Duration	28 days
Test	NOEC
Result	2.212 mg/l ·
Other information	

Product/substance	acetone
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	5.540 mg/l, Oncorhynchus mykiss ·
Other information	

Product/substance	acetone
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	> 100 mg/l, Pimephales promelas ·
Other information	

Product/substance	acetone
Test method	
Species	Crustacean
Compartment	
Duration	48 hours

Test	EC50
Result	8.800 mg/l, Daphnia magna ·
Other information	

12.2. Persistence and degradability

Product/substance	ethyl acetate
Biodegradable	Yes
Test method	
Result	

Product/substance	acetone
Biodegradable	Yes
Test method	
Result	

12.3. Bioaccumulative potential

Product/substance	acetone
Test method	
Potential bioaccumulation	No
LogPow	No data available.
BCF	3
Other information	

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 3 - Flammable
HP 4 - Irritant (skin irritation and eye damage)
Dispose of contents/container to an approved waste disposal plant.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code

08 04 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 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
ADR	UN1133	ADHESIVES	Class: 3 Labels: 3 Classification code: F1 	II	No	Limited quantities: 5 L Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN1133	ADHESIVES	Class: 3	II	No	Limited quantities:

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
			Labels: 3 Classification code: F1 			5 L EmS: F-E S-D See below for additional information.
IATA	UN1133	ADHESIVES	Class: 3 Labels: 3 Classification code: F1 	II	No	See below for additional information.

* Packing group
** Environmental hazards

Additional information

ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.
IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.
IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.
This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

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 - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

▼Regulation on drug precursors

acetone is included (Category 3)
toluene is included (Category 3)

▼Regulation on explosives precursors

acetone (Annex II)

Additional information

Not applicable.

▼Sources

The Health and Safety at Work etc. Act 1974 Regulations 2013.
Control of Major Accident Hazards (COMAH) Regulations 2015.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.
The Controlled Drugs (Drug Precursors) Regulations 2008.
Council Regulation (EC) No 2019/1148 on explosives precursors as retained and amended in UK law.
Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.
Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.
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.
H361d, Suspected of damaging the unborn child.
H373, May cause damage to organs through prolonged or repeated exposure.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne
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
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.
The classification of the mixture in regard to 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.
Country-language: GB-en