



Safety Data Sheet according to Regulation (EC) No1907/2006

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SDS No. : 373910
V004.2

LOCTITE ABLESTIK 286 PTB

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

1.1. Product identifier

LOCTITE ABLESTIK 286 PTB

Contains:

3,3'-Oxybis(ethyleneoxy)bis(propylamine)

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight \leq 700)

RP Bisphenol F-epichlorhydrin resin, MW \leq 700

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

Intended use:

Epoxy adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Limited

2 Bishop Square Business Park

AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933

Fax-no.: +44 1606 863762

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Skin corrosion

Category 1B

H314 Causes severe skin burns and eye damage.

Skin sensitizer

Category 1

H317 May cause an allergic skin reaction.

Chronic hazards to the aquatic environment

Category 3

H412 Harmful to aquatic life with long lasting effects.

Classification (DPD):

Corrosive
R34 Causes burns.
Sensitizing
R43 May cause sensitisation by skin contact.
Dangerous for the environment
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word: Danger

Hazard statement:
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement: Prevention
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement: Response
P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/physician.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Label elements (DPD):

C - Corrosive



Risk phrases:
R34 Causes burns.
R43 May cause sensitisation by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:
Contains epoxy constituents. See information supplied by the manufacturer.

Contains:

3,3'-Oxybis(ethyleneoxy)bis(propylamine),

Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients**General chemical description:**

Adhesive

Base substances of preparation:

Epoxy resin

organic amine

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
3,3'-Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	224-207-2	>= 10- < 20 %	Skin corrosion 1B H314
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	500-033-5 500-033-5 01-2119456619-26	>= 5- < 10 %	Serious eye irritation 2 H319 Skin irritation 2 H315 Skin sensitizer 1 H317 Chronic hazards to the aquatic environment 2 H411
RP Bisphenol F-epichlorohydrin resin, MW<=700 28064-14-4		>= 0,1- < 1 %	Serious eye irritation 2 H319 Skin irritation 2 H315 Skin sensitizer 1 H317 Chronic hazards to the aquatic environment 2 H411

For full text of the H - statements and other abbreviations see section 16 "Other information".**Substances without classification may have community workplace exposure limits available.****Declaration of ingredients according to DPD (EC) No 1999/45:**

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
3,3'- Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	224-207-2	>= 10 - < 20 %	C - Corrosive; R34
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	500-033-5 500-033-5 01-2119456619-26	>= 5 - < 10 %	R43 Xi - Irritant; R36/38 N - Dangerous for the environment; R51/53
RP Bisphenol F-epichlorohydrin resin, MW<=700 28064-14-4		>= 0,1 - < 1 %	Xi - Irritant; R36/38, R43 N - Dangerous for the environment; R51/53

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.**Substances without classification may have community workplace exposure limits available.****SECTION 4: First aid measures****4.1. Description of first aid measures**

Inhalation:

Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

Skin contact:

Rinse with running water and soap.
Obtain medical attention if irritation persists.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

SKIN: Rash, Urticaria.

Causes burns.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

water, carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x) can be released.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.
Wear protective equipment.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections

See advice in chapter 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid skin and eye contact.
See advice in chapter 8

Hygiene measures:

Good industrial hygiene practices should be observed.
Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.
Keep container tightly sealed.
Store at room temperature.

7.3. Specific end use(s)

Epoxy adhesive

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational Exposure Limits**

Valid for
Great Britain

Ingredient	ppm	mg/m ³	Type	Category	Remarks
ALUMINIUM OXIDES, INHALABLE DUST 1344-28-1		10	Time Weighted Average (TWA):		EH40 WEL
ALUMINIUM OXIDES, RESPIRABLE DUST 1344-28-1		4	Time Weighted Average (TWA):		EH40 WEL
SILICA, AMORPHOUS, INHALABLE DUST 112945-52-5		6	Time Weighted Average (TWA):		EH40 WEL
SILICA, AMORPHOUS, RESPIRABLE DUST 112945-52-5		2,4	Time Weighted Average (TWA):		EH40 WEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (freshwater)					0,006 mg/L	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (marine water)					0,0006 mg/L	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	aqua (intermittent releases)					0,018 mg/L	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	STP					10 mg/L	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (freshwater)					0,996 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sediment (marine water)					0,0996 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	soil					0,196 mg/kg	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	oral					11 mg/kg food	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	worker	Dermal	Acute/short term exposure - systemic effects		8,33 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	worker	inhalation	Acute/short term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	worker	Dermal	Long term exposure - systemic effects		8,33 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	worker	inhalation	Long term exposure - systemic effects		12,25 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Dermal	Acute/short term exposure - systemic effects		3,571 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	Dermal	Long term exposure - systemic effects		3,571 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	inhalation	Acute/short term exposure - systemic effects		0,75 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	inhalation	Long term exposure - systemic effects		0,75 mg/m3	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	oral	Acute/short term exposure - systemic effects		0,75 mg/kg bw/day	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	general population	oral	Long term exposure - systemic effects		0,75 mg/kg bw/day	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A

Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection:

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	paste white
Odor	Amine
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	> 135 °C (> 275 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density (ρ)	2,23 g/cm ³
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Slight
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reacts with alcohols and amines.

Reacts with oxidants, acids and lyes

Reaction with some curing agents may produce an exothermic reaction which in large masses could cause runaway polymerization.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

No decomposition if stored and applied as directed.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

Hydrocarbons
carbon oxides.
nitrogen oxides
Rapid polymerisation may generate excessive heat and pressure.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****General toxicological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Skin irritation:

Causes severe skin burns and eye damage.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
3,3'- Oxybis(ethyleneoxy)bis(p ropylamine) 4246-51-9	LD50	3.160 mg/kg	oral		rat	

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
3,3'- Oxybis(ethyleneoxy)bis(p ropylamine) 4246-51-9	LD50	2.500 mg/kg	dermal		rabbit	
RP Bisphenol F- epichlorohydrin resin, MW<=700 28064-14-4	LD50	> 6.000 mg/kg	dermal		rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
3,3'- Oxybis(ethyleneoxy)bis(p ropylamine) 4246-51-9	corrosive		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	negative	bacterial reverse mutation assay (e.g Ames test)			OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)

SECTION 12: Ecological information**General ecological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity**Ecotoxicity:**

Harmful to aquatic life with long lasting effects.
Do not empty into drains / surface water / ground water.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
3,3'- Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	LC50	215 - 464 mg/l	Fish	96 h	Leuciscus idus	
3,3'- Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	EC50	218 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
3,3'- Oxybis(ethyleneoxy)bis(propylamine) 4246-51-9	EC50	666 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	LC50	1,750000 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
RP Bisphenol F-epichlorohydrin resin, MW<=700 28064-14-4	EC50	3,5 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
RP Bisphenol F-epichlorohydrin resin, MW<=700 28064-14-4		aerobic	10 - 16 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) 25068-38-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

Do not empty into drains / surface water / ground water.
Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information**14.1. UN number**

ADR	2735
RID	2735
ADNR	2735
IMDG	2735
IATA	2735

14.2. UN proper shipping name

ADR	AMINES, LIQUID, CORROSIVE, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine))
RID	AMINES, LIQUID, CORROSIVE, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine))
ADNR	AMINES, LIQUID, CORROSIVE, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine))
IMDG	AMINES, LIQUID, CORROSIVE, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine))
IATA	Amines, liquid, corrosive, n.o.s. (3,3'-oxybis(ethyleneoxy)bis(propylamine))

14.3. Transport hazard class(es)

ADR	8
RID	8
ADNR	8
IMDG	8
IATA	8

14.4. Packaging group

ADR	III
RID	III
ADNR	III
IMDG	III
IATA	III

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADNR	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable
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	Tunnelcode: (E)
RID	not applicable
ADNR	not applicable
IMDG	not applicable
IATA	not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

VOC content < 3 %
(1999/13/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

- R34 Causes burns.
- R36/38 Irritating to eyes and skin.
- R43 May cause sensitisation by skin contact.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.