



Safety Data Sheet according to (EC) No 1907/2006

Page 1 of 10

Loctite 243

sds no. : 316211
V004.4

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

Product identifier:

Loctite 243

Relevant identified uses of the substance or mixture and uses advised against:

Intended use:
Adhesive

Details of the supplier of the safety data sheet:

Henkel Limited
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Great Britain

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SECTION 2: Hazards identification

Classification of the substance or mixture:

Classification (DPD):

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.

Label elements (DPD):

Xi - Irritant



Risk phrases:

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:

S24 Avoid contact with skin.

S37 Wear suitable gloves.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Additional labeling:

For consumer use only: S2 Keep out of the reach of children

S46 If swallowed, seek medical advice immediately and show this container or label.

Contains:

Maleic acid

Other hazards:

None if used properly.

SECTION 3: Composition/information on ingredients

General chemical description:

Anaerobic adhesive

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Cumene hydroperoxide 80-15-9	201-254-7	> 0,1- < 0,9 %	Acute toxicity 4; Dermal H312 Specific target organ toxicity - repeated exposure 2 H373 Acute toxicity 3; Inhalation H331 Acute toxicity 4; Oral H302 Organic peroxides E H242 Chronic hazards to the aquatic environment 2 H411 Skin corrosion 1B H314
Maleic acid 110-16-7	203-742-5	> 0,1- < 0,5 %	Acute toxicity 4; Oral H302 Serious eye irritation 2 H319 Specific target organ toxicity - single exposure 3 H335 Skin irritation 2 H315 Skin sensitizer 1 H317
Cumene 98-82-8	202-704-5	> 0,05- < 0,5 %	Flammable liquids 3 H226 Aspiration hazard 1 H304 Specific target organ toxicity - single exposure 3 H335 Chronic hazards to the aquatic environment 2 H411

Only dangerous ingredients for which a CLP classification is already available are displayed in this table.

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
2,4,6-Triallyloxy-s-triazine 101-37-1	202-936-7	>= 2,5 - < 10 %	Xn - Harmful; R22 N - Dangerous for the environment; R51/53
Undecanoic acid, 11-amino-, homopolymer 25587-80-8		>= 0,25 - < 2,5 %	N - Dangerous for the environment; R50/53
Cumene hydroperoxide 80-15-9	201-254-7	>= 0,1 - < 0,9 %	T - Toxic; R23 Xn - Harmful; R21/22, R48/20/22 O - Oxidizing; R7 C - Corrosive; R34 N - Dangerous for the environment; R51, R53
Maleic acid 110-16-7	203-742-5	>= 0,1 - < 0,5 %	Xn - Harmful; R22 Xi - Irritant; R36/37/38 R43
Cumene 98-82-8	202-704-5	>= 0,05 - < 0,5 %	R10 Xn - Harmful; R65 Xi - Irritant; R37 N - Dangerous for the environment; R51, R53

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

Description of first aid measures:

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:

Rinse with running water and soap.
Seek medical advice.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.
Seek medical advice.

Most important symptoms and effects, both acute and delayed:

SKIN: Redness, inflammation.

EYE: Irritation, conjunctivitis.

Indication of any immediate medical attention and special treatment needed:

See section: Description of first aid measures

SECTION 5: Firefighting measures

Extinguishing media:

Suitable extinguishing media:

Carbon dioxide, foam, powder
Fine water spray

Extinguishing media which must not be used for safety reasons:

None known

Special hazards arising from the substance or mixture:

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO₂) can be released.
In case of fire, keep containers cool with water spray.

Advice for firefighters:

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

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid skin and eye contact.
Ensure adequate ventilation.

Environmental precautions:

Do not let product enter drains.

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.

Reference to other sections:

See advice in chapter 8

SECTION 7: Handling and storage

Precautions for safe handling:

Use only in well-ventilated areas.
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Hygiene measures:

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

Conditions for safe storage, including any incompatibilities:

Ensure good ventilation/extraction.
Store in original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

Specific end use(s):

Adhesive

SECTION 8: Exposure controls/personal protection**Control parameters:**

Valid for
Great Britain

Ingredient	ppm	mg/m ³	Type	Category	Remarks
PROPANE-1,2-DIOL, PARTICULATES 57-55-6		10	Time Weighted Average (TWA):		EH40 WEL
PROPANE-1,2-DIOL, TOTAL VAPOUR AND PARTICULATES 57-55-6	150	474	Time Weighted Average (TWA):		EH40 WEL
PROPANE-1,2-DIOL, TOTAL VAPOUR AND PARTICULATES 57-55-6	150	474	Time Weighted Average (TWA):		EH40 WEL
PROPANE-1,2-DIOL, PARTICULATES 57-55-6		10	Time Weighted Average (TWA):		EH40 WEL
CUMENE 98-82-8	25	125	Time Weighted Average (TWA):		EH40 WEL
CUMENE 98-82-8	50	250	Short Term Exposure Limit (STEL):		EH40 WEL
CUMENE 98-82-8			Skin designation:	Can be absorbed through the skin.	EH40 WEL
CUMENE 98-82-8			Skin designation:	Can be absorbed through the skin.	ECTLV
CUMENE 98-82-8	50	250	Short Term Exposure Limit (STEL):	Indicative	ECTLV
CUMENE 98-82-8	20	100	Time Weighted Average (TWA):	Indicative	ECTLV

Exposure controls:**Respiratory protection:**

Use only in well-ventilated areas.

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; \geq 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; \geq 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:

Wear protective glasses.

Skin protection:
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties:

Appearance	liquid blue
Odor	characteristic
pH	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	> 93 °C (> 93 93 °C)
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density	No data available / Not applicable
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)	No data available / Not applicable
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

Other information:

No data available / Not applicable

SECTION 10: Stability and reactivity

Reactivity:

Peroxides.

Possibility of hazardous reactions:

See section reactivity

Conditions to avoid:

Stable

Incompatible materials:

None if used properly.

Hazardous decomposition products:

carbon oxides.

SECTION 11: Toxicological information

General toxicological information:

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Oral toxicity:

May cause irritation to the digestive tract.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

May cause mild irritation to the eyes.

Sensitizing:

May cause sensitization by skin contact.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral	4 h	rat	
	LC50	220 ppm	inhalation		rat	
	LD50	500 mg/kg	dermal		rat	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	corrosive		rabbit	

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	

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

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

Harmful to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Ecotoxicity:

Harmful to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

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

Mobility:

Cured adhesives are immobile.

Persistence and Biodegradability:

The product is not biodegradable.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
2,4,6-Triallyloxy-s-triazine 101-37-1	LC50	4,36 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,4,6-Triallyloxy-s-triazine 101-37-1	EC50	19,4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Undecanoic acid, 11-amino-, homopolymer 25587-80-8	NOEC	> 0,024 mg/l	Fish	96 h		OECD Guideline 203 (Fish, Acute Toxicity Test)
Undecanoic acid, 11-amino-, homopolymer 25587-80-8	NOEC	> 0,024 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Undecanoic acid, 11-amino-, homopolymer 25587-80-8	NOEC	> 0,0073 mg/l	Algae	72 h		OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Maleic acid 110-16-7	LC50	> 245 mg/l	Fish	48 h	Leuciscus idus	
Maleic acid 110-16-7	EC50	245 mg/l	Daphnia	24 h	Daphnia magna	
Cumene 98-82-8	LC50	4,8 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene 98-82-8	EC50	4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene 98-82-8	EC50	2,6 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
2,4,6-Triallyloxy-s-triazine 101-37-1		aerobic	7 - 9 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Undecanoic acid, 11-amino-, homopolymer 25587-80-8		no data	7 %	
Cumene hydroperoxide 80-15-9			18 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Maleic acid 110-16-7	readily biodegradable	aerobic	87 - 88 %	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)
Cumene 98-82-8		aerobic	86 %	

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
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2,4,6-Triallyloxy-s-triazine 101-37-1	2,8				20 °C	
Cumene hydroperoxide 80-15-9		9,1				OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Cumene hydroperoxide 80-15-9	2,16					
Maleic acid 110-16-7	-0,48					
Cumene 98-82-8		35,5		Carassius auratus		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Cumene 98-82-8	3,55				23 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

SECTION 13: Disposal considerations**Waste treatment methods:****Product disposal:**

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

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.

Disposal must be made according to official regulations.

Waste code

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

SECTION 14: Transport information**General information:**

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

SECTION 15: Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

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

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:

- R10 Flammable.
 - R21/22 Harmful in contact with skin and if swallowed.
 - R22 Harmful if swallowed.
 - R23 Toxic by inhalation.
 - R34 Causes burns.
 - R36/37/38 Irritating to eyes, respiratory system and skin.
 - R37 Irritating to respiratory system.
 - R43 May cause sensitisation by skin contact.
 - R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
 - R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - R51 Toxic to aquatic organisms.
 - R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - R53 May cause long-term adverse effects in the aquatic environment.
 - R65 Harmful: may cause lung damage if swallowed.
 - R7 May cause fire.
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- H226 Flammable liquid and vapour.
 - H242 Heating may cause a fire.
 - H302 Harmful if swallowed.
 - H304 May be fatal if swallowed and enters airways.
 - H312 Harmful in contact with skin.
 - H314 Causes severe skin burns and eye damage.
 - H315 Causes skin irritation.
 - H317 May cause an allergic skin reaction.
 - H319 Causes serious eye irritation.
 - H331 Toxic if inhaled.
 - H335 May cause respiratory irritation.
 - H373 May cause damage to organs through prolonged or repeated exposure.
 - 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.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and its subsequent amendments, and Commission Directive 1999/45/EC.