

Loctite 243

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

Page 1 of 10

sds no.: 316211 V003.0

Revision: 13.10.2010

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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:

Adhesive

Details of the supplier of the safety data sheet:

Henkel Limited Technologies House Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (0)1442 278000 Fax-no.: +44 (0)1442 278071

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2. Hazards identification

Classification of the substance or mixture:

Classification (DPD):

Sensitizing

R43 May cause sensitisation by skin contact.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

MSDS-No.: 316211 Loctite 243 Page 2 of 10

V003.0

Label elements (DPD):

Xi - Irritant



Risk phrases:

R43 May cause sensitisation by skin contact. R52/53 Harmful to aquatic over 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.

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.

3. Composition/information on ingredients

General chemical description:

Anaerobic adhesive

MSDS-No.: 316211 Loctite 243 Page 3 of 10

V003.0

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

Hazardous components	EINECS	content	Classification
CAS-No.	REACH-Reg No.		
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
76.1.	202 742 7	0.1 0.7 0.	H314
Maleic acid	203-742-5	> 0,1-< 0,5 %	Acute toxicity 4; Oral
110-16-7			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
70-02-0			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.	EINECS REACH-Reg No.	content	Classification
2,4,6-Triallyloxy-s-triazine	202-936-7	> 5 - < 10 %	Xn - Harmful; R22
101-37-1			N - Dangerous for the environment; R51/53
Undecanoic acid, 11-amino-, homopolymer 25587-80-8		> 0,1 - <= 1 %	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.

4. First aid measures

MSDS-No.: 316211 Loctite 243 Page 4 of 10

V003.0

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: Rash, Urticaria.

Indication of any immediate medical attention and special treatment needed:

See section: Description of first aid measures

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.

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

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.

MSDS-No.: 316211 Loctite 243 Page 5 of 10

V003.0

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

8. Exposure controls/personal protection

Control parameters:

Valid for

Great Britain

Ingredient	ppm	mg/m ³	Туре	Category	Remarks
CUMENE	25	125	Time Weighted Average		EH40 WEL
98-82-8			(TWA):		
CUMENE	50	250	Short Term Exposure		EH40 WEL
98-82-8			Limit (STEL):		
CUMENE			Skin designation:	Can be absorbed through the	EH40 WEL
98-82-8				skin.	
CUMENE			Skin designation:	Can be absorbed through the	ECTLV
98-82-8				skin.	
CUMENE	50	250	Short Term Exposure	Indicative	ECTLV
98-82-8			Limit (STEL):		
CUMENE	20	100	Time Weighted Average	Indicative	ECTLV
98-82-8			(TWA):		

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 (IIR; >= 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 (IIR; >= 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.

MSDS-No.: 316211 Loctite 243 Page 6 of 10

V003.0

9. Physical and chemical properties

Information on basic physical and chemical properties:

Appearance liquid
Blue
Odor characteristic

pН No data available. Initial boiling point No data available. Flash point > 93 °C (> 199.4 °F) No data available. Decomposition temperature No data available. Vapour pressure Density No data available. Bulk density No data available. Viscosity No data available. Viscosity (kinematic) No data available. Explosive properties No data available. Solubility (qualitative) No data available. Solidification temperature No data available. Melting point No data available. Flammability No data available. Auto-ignition temperature No data available. Explosive limits No data available. Partition coefficient: n-octanol/water No data available. No data available. Evaporation rate Vapor density No data available. Oxidising properties No data available.

Other information:

No data available.

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.

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.

Inhalative toxicity:

May cause irritation to respiratory system.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

MSDS-No.: 316211 Loctite 243 Page 7 of 10

V003.0

Eye irritation:

May cause mild irritation to the eyes.

Sensitizing:

May cause sensitization by inhalation.

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.

MSDS-No.: 316211 Loctite 243 Page 8 of 10

V003.0

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity	Exposure time	Species	Method
24677111	Y 070	100 0	Study	0.51		orgo g : i ii
2,4,6-Triallyloxy-s-triazine	LC50	4,36 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
101-37-1						203 (Fish, Acute
2.4.6 Trialladanna a trianina	EC50	10.4 /1	Danhaia	48 h	Donkaio mona	Toxicity Test) OECD Guideline
2,4,6-Triallyloxy-s-triazine 101-37-1	ECSU	19,4 mg/l	Daphnia	48 II	Daphnia magna	202 (Daphnia sp.
101-37-1						Acute
						Immobilisation
						Test)
Undecanoic acid, 11-amino-,	NOEC	> 0,024 mg/l	Fish	96 h		OECD Guideline
homopolymer	11020	> 0,02 · mg ·	1 1011	7011		203 (Fish, Acute
25587-80-8						Toxicity Test)
Undecanoic acid, 11-amino-,	NOEC	> 0,024 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
homopolymer			•			202 (Daphnia sp.
25587-80-8						Acute
						Immobilisation
						Test)
Undecanoic acid, 11-amino-,	NOEC	> 0,0073 mg/l	Algae	72 h		OECD Guideline
homopolymer						201 (Alga, Growth
25587-80-8						Inhibition Test)
Cumene hydroperoxide	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
80-15-9						203 (Fish, Acute
C	ECEO	10 /1	Don't all	40.1	Dealesis access	Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp.
80-13-9						Acute
						Immobilisation
						Test)
Cumene hydroperoxide	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline
80-15-9		- , 8	8		r	201 (Alga, Growth
						Inhibition Test)
Maleic acid	LC50	> 245 mg/l	Fish	48 h	Leuciscus idus	
110-16-7						
Maleic acid	EC50	245 mg/l	Daphnia	24 h	Daphnia magna	
110-16-7						
Cumene	LC50	4,8 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
98-82-8						203 (Fish, Acute
G	ECEO	4 /1	Don't all	48 h	Dankai ana ana	Toxicity Test) OECD Guideline
Cumene 98-82-8	EC50	4 mg/l	Daphnia	48 n	Daphnia magna	202 (Daphnia sp.
98-82-8						Acute
						Immobilisation
						Test)
Cumene	EC50	2,6 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
98-82-8	2000	2,0 1119 1	1	, 2 11	(new name: Pseudokirchnerella	201 (Alga, Growth
					subcapitata)	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" BiodegradabilityClosed Bottle Test)
Cumene 98-82-8		aerobic	86 %	,

Bioaccumulative potential / Mobility in soil:

Γ	Hazardous components	LogKow	Bioconcentration	Exposure	Species	Temperature	Method
	CAS-No.		factor (BCF)	time			

MSDS-No.: 316211 Loctite 243 Page 9 of 10

V003.0

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 (noctanol / water), Shake Flask Method)

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

14. Transport information

General information:

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

15. Regulatory information

 $Safety, health \ and \ environmental \ regulations/legislation \ specific \ for \ the \ substance \ or \ mixture:$

VOC content (1999/13/EC) MSDS-No.: 316211 Loctite 243 Page 10 of 10

V003.0

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.

H226Flammable liquid and vapour.

H242Heating may cause a fire.

H302Harmful if swallowed.

H304May be fatal if swallowed and enters airways.

H312Harmful in contact with skin.

H314Causes severe skin burns and eye damage.

H315Causes skin irritation.

H317May cause an allergic skin reaction.

H319Causes serious eye irritation.

H331Toxic if inhaled.

H335May cause respiratory irritation.

H373May cause damage to organs through prolonged or repeated exposure.

H411Toxic 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 it's subsequent amendments, and Commission Directive 1999/45/EC.