

Loctite 242

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

Page 1 of 10

SDS No.: 173036

V004.0 Revision: 26.01.2015

printing date: 12.03.2015

Replaces version from: 14.02.2014

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

1.1. Product identifier

Loctite 242

Contains:

Cumene hydroperoxide

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

Intended use:

Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

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):

Serious eye irritation

Category 2

H319 Causes serious eye irritation.

Category 3

Specific target organ toxicity - single exposure H335 May cause respiratory irritation.

Target organ: respiratory tract irritation

Classification (DPD):

Xi - Irritant

R36/37 Irritating to eyes and respiratory system.

2.2. Label elements

Label elements (CLP):

MSDS-No.: 173036 Loctite 242 Page 2 of 10

V004.0

Hazard pictogram:



Signal word: Warning

Hazard statement: H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement: ***For consumer use only: P101 If medical advice is needed, have product container or

label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in

accordance with local authority requirements***

Precautionary statement:

Prevention

P261 Avoid breathing vapours.

Precautionary statement:

Response

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

Label elements (DPD):

Xi - Irritant



Risk phrases:

R36/37 Irritating to eyes and respiratory system.

Safety phrases:

S25 Avoid contact with eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S51 Use only in well-ventilated areas.

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.

2.3. Other hazards

None if used properly.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Anaerobic adhesive

MSDS-No.: 173036 Loctite 242 Page 3 of 10

V004.0

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	1-< 2,5 %	Acute toxicity 4; Dermal H312 Specific target organ toxicity - repeated exposure 2 H373 Acute toxicity 4; Oral H302 Organic peroxides E H242 Acute toxicity 3; Inhalation H331 Skin corrosion 1B H314 Chronic hazards to the aquatic environment 2 H411
N,N-Diethyl-p-toluidine 613-48-9	210-345-0	0,1-< 1 %	Acute toxicity 3; Oral H301 Acute toxicity 3; Dermal H311 Acute toxicity 3; Inhalation H331 Specific target organ toxicity - repeated exposure 2 H373 Chronic hazards to the aquatic environment 3 H412
1,4-Naphthalenedione 130-15-4	204-977-6	100- < 250 PPM	Acute toxicity 3; Oral H301 Skin irritation 2; Dermal H315 Skin sensitizer 1; Dermal H317 Serious eye irritation 2 H319 Acute toxicity 1; Inhalation H330 Specific target organ toxicity - single exposure 3; Inhalation H335 Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410 M factor: 10

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	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Cumene hydroperoxide	201-254-7	1 - < 2,5 %	T - Toxic; R23
80-15-9			Xn - Harmful; R21/22, R48/20/22
			C - Corrosive; R34
			O - Oxidizing; R7
			N - Dangerous for the environment; R51/53
N,N-Diethyl-p-toluidine	210-345-0	0,1 - < 1 %	T - Toxic; R23/24/25
613-48-9			R33
			R52/53
Cumene	202-704-5	0,1 - < 1 %	R10
98-82-8			Xn - Harmful; R65
			Xi - Irritant; R37
			N - Dangerous for the environment; R51/53
1,4-Naphthalenedione	204-977-6	100 - < 250 PPM	T+ - Very toxic; R25, R26
130-15-4			Xi - Irritant; R36/37/38, R43
			N - Dangerous for the environment; R50/53

MSDS-No.: 173036 Loctite 242 Page 4 of 10

V004.0

Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

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

Causes serious eye irritation.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

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:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

None known

5.2. 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.

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact.

Ensure adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains.

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 section 8

MSDS-No.: 173036 Loctite 242 Page 5 of 10

V004.0

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use only in well-ventilated areas.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Avoid skin and eye contact.

See advice in section 8

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.

7.2. Conditions for safe storage, including any incompatibilities

Store in original containers at $8-21^{\circ}$ C ($46.4-69.8^{\circ}$ F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

7.3. Specific end use(s)

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
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
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	25	125	Time Weighted Average (TWA):		EH40 WEL
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

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

Loctite 242 MSDS-No.: 173036 Page 6 of 10

V004.0

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; \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.

Eve protection:

Wear protective glasses.

Skin protection:

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance liquid blue

Odor characteristic

Odour threshold No data available / Not applicable

3 - 6 pΗ

()

Initial boiling point $> 149 \, ^{\circ}\text{C} \, (> 300.2 \, ^{\circ}\text{F})$ Flash point $> 100 \, ^{\circ}\text{C} \, (> 212 \, ^{\circ}\text{F})$

Decomposition temperature No data available / Not applicable

Vapour pressure < 0.1 mm hg

(25 °C (77 °F))

Vapour pressure < 300 mbar

(50 °C (122 °F))

Density 1,08 g/cm3

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 Not miscible

Solubility (qualitative)

(Solvent: Water)

Solubility (qualitative) Miscible

(Solvent: Acetone)

Solidification temperature No data available / Not applicable No data available / Not applicable Melting point No data available / Not applicable Flammability 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 No data available / Not applicable Vapor density No data available / Not applicable Oxidising properties

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with strong oxidants.

MSDS-No.: 173036 Loctite 242 Page 7 of 10

V004.0

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 used according to specifications.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

Irritating organic vapours.

Oxides of carbon.

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.

STOT-single exposure:

May cause respiratory irritation.

Oral toxicity:

This material is considered to have low toxicity if swallowed.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Causes serious eye irritation.

Acute oral 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		rat	

Skin corrosion/irritation:

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

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of	Metabolic activation /	Species	Method
0.125 1.00		administration	Exposure time		
Cumene hydroperoxide	positive	bacterial reverse	without		OECD Guideline 471
80-15-9		mutation assay (e.g			(Bacterial Reverse Mutation
		Ames test)			Assay)
Cumene hydroperoxide	negative	dermal		mouse	
80-15-9					

MSDS-No.: 173036 Loctite 242 Page 8 of 10

V004.0

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	

SECTION 12: Ecological information

General ecological information:

Cured Loctite products are typical polymers and do not pose any immediate environmental hazards. 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:

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

Hazardous components	Value	Value	Acute	Exposure	Species	Method
CAS-No.	type		Toxicity	time		
			Study			
Cumene hydroperoxide	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
80-15-9						203 (Fish, Acute
						Toxicity Test)
Cumene hydroperoxide	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
80-15-9						202 (Daphnia sp.
						Acute
						Immobilisation
						Test)
Cumene hydroperoxide	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline
80-15-9						201 (Alga, Growth
						Inhibition Test)
1,4-Naphthalenedione	EC50	0,011 mg/l	Algae	72 h	Dunaliella bioculata	OECD Guideline
130-15-4		_				201 (Alga, Growth
						Inhibition Test)

12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
1,4-Naphthalenedione 130-15-4		no data	0 - 60 %	OECD 301 A - F

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

MSDS-No.: 173036 Loctite 242 Page 9 of 10

V004.0

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. 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.

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

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

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

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

14.4. Packaging group

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

14.5. Environmental hazards

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

14.6. Special precautions for user

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

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 (1999/13/EC) < 3 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

MSDS-No.: 173036 Loctite 242 Page 10 of 10

V004.0

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.

R23 Toxic by inhalation.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R25 Toxic if swallowed.

R26 Very toxic by inhalation.

R33 Danger of cumulative effects.

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.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

R65 Harmful: may cause lung damage if swallowed.

R7 May cause fire.

H242 Heating may cause a fire.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

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.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful 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.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.