

Loctite 222

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

Page 1 of 9

sds no.: 168430 V002.2

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

### Product identifier:

Loctite 222

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

Intended use: Threadlocker

# Details of the supplier of the safety data sheet:

Henkel Limited

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Great Britain

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### **Emergency Telephone Number:**

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

# **SECTION 2: Hazards identification**

### Classification of the substance or mixture:

# Classification (DPD):

Xi - Irritant

R36/37 Irritating to eyes and respiratory system.

MSDS-No.: 168430 Loctite 222 Page 2 of 9

V002.2

# Label elements (DPD):

### Xi - Irritant



### Risk phrases:

R36/37 Irritating to eyes and respiratory system.

### Safety phrases:

S23 Do not breathe vapour.

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.

### Other hazards:

None if used properly.

# **SECTION 3: Composition/information on ingredients**

### General chemical description:

Product based on polyethylene glycol dimethacrylate.

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Cumene hydroperoxide	201-254-7	> 1-< 3 %	Acute toxicity 4; Dermal
80-15-9			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
Cumene	202-704-5	> 0,1-< 0,9 %	Flammable liquids 3
98-82-8			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.

MSDS-No.: 168430 Loctite 222 Page 3 of 9

V002.2

### 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 - < 3 %	T - Toxic; R23
80-15-9			Xn - Harmful; R21/22, R48/20/22
			O - Oxidizing; R7
			C - Corrosive; R34
			N - Dangerous for the environment; R51/53
Cumene	202-704-5	> 0,1 -< 0,9 %	R10
98-82-8			Xn - Harmful; R65
			Xi - Irritant; R37
			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**

### 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:

Wash skin with water

In case of adverse health effects seek medical advice.

#### Eve contact:

Flush eyes with plenty of water for at least 5 minutes. If irritation persists seek medical attention.

### Ingestion:

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

In case of adverse health effects seek medical advice.

### Most important symptoms and effects, both acute and delayed:

EYE: Irritation, conjunctivitis.

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

# 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:

Foam, extinguishing powder, carbon dioxide.

### 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**

MSDS-No.: 168430 Loctite 222 Page 4 of 9

V002.2

### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

# 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.

Gloves and safety glasses should be worn

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:

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.

### Specific end use(s):

Threadlocker

# **SECTION 8: Exposure controls/personal protection**

# Control parameters:

Valid for

Great Britain

Ingredient	ppm	mg/m <sup>3</sup>	Type	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.

MSDS-No.: 168430 Loctite 222 Page 5 of 9

V002.2

#### 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:

Wear protective glasses.

Skin protection:

Wear suitable protective clothing.

# **SECTION 9: Physical and chemical properties**

### Information on basic physical and chemical properties:

Appearance liquid purple
Odor characteristic

pH 3,00 - 6,00

0

 $\begin{array}{ll} \mbox{Initial boiling point} & > 150 \ ^{\circ}\mbox{C} \ (> 150 \ 150 \ ^{\circ}\mbox{C}) \\ \mbox{Flash point} & > 100 \ ^{\circ}\mbox{C} \ (> 100 \ 100 \ ^{\circ}\mbox{C}) \end{array}$ 

Decomposition temperature No data available / Not applicable

Vapour pressure < 0,1300000 mbar

(25 °C (77 °F))

Density 1,08 g/cm3

0

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) Slight

(Solvent: Water)

Solubility (qualitative) Miscible

(Solvent: Acetone)

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 No data available / Not applicable Explosive limits No data available / Not applicable Partition coefficient: n-octanol/water Evaporation rate No data available / Not applicable No data available / Not applicable Vapor density No data available / Not applicable Oxidising properties

### Other information:

No data available / Not applicable

# **SECTION 10: Stability and reactivity**

### Reactivity:

Peroxides.

### Chemical stability:

Stable under recommended storage conditions.

MSDS-No.: 168430 Loctite 222 Page 6 of 9

V002.2

### Possibility of hazardous reactions:

See section reactivity

### Conditions to avoid:

Stable under normal conditions of storage and use.

#### Incompatible materials:

None if used properly.

### Hazardous decomposition products:

Oxides of carbon.

# **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.

### Inhalative toxicity:

Irritating to respiratory system

#### Skin irritation:

Although it is not a common sensitizer there may be a risk of sensitization on prolonged or repeated contact with damaged skin

### Eye irritation:

Irritating to eyes.

# Acute toxicity:

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

# Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Cumene hydroperoxide	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	

MSDS-No.: 168430 Loctite 222 Page 7 of 9

V002.2

# **SECTION 12: Ecological information**

# General ecological information:

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

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.

No data available for the product.

### Mobility:

Cured adhesives are immobile.

# **Toxicity:**

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
				l .		Inhibition Test)
Cumene	LC50	4,8 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
98-82-8						203 (Fish, Acute
				Į l		Toxicity Test)
Cumene	EC50	4 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
98-82-8						202 (Daphnia sp.
						Acute
						Immobilisation
						Test)
Cumene	EC50	2,6 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
98-82-8				1	(new name: Pseudokirchnerella	201 (Alga, Growth
					subcapitata)	Inhibition Test)

# Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Cumene hydroperoxide 80-15-9			18 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening 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
Cumene hydroperoxide 80-15-9		9,1				OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
Cumene hydroperoxide 80-15-9	2,16					unough 1 ion 1 cot)
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)

MSDS-No.: 168430 Loctite 222 Page 8 of 9

V002.2

# **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, ADNR, 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)

MSDS-No.: 168430 Loctite 222 Page 9 of 9

V002.2

### **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.

R34 Causes burns.

R37 Irritating to respiratory system.

R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R51/53 Toxic 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.

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.

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