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

sds no. : 168430
V002.1

Loctite 222

Revision: 14.02.2011
printing date: 31.05.2011

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:
Anaerobic

Details of the supplier of the safety data sheet:
Henkel Ireland Limited
Product Safety & Regulatory Affairs
Tallaght Business Park, Whitestown
Dublin 24

Ireland

Phone: +353 (14046444)
Fax-no.: +353 (14519926)

ua-productsafety.uk@uk.henkel.com

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

2. Hazards identification

Classification of the substance or mixture:

Classification (DPD):
Xi - Irritant
R36/37 Irritating to eyes and respiratory system.

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.

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 CAS-No.	EC Number REACH-Reg No.	content	Classification
Cumene hydroperoxide 80-15-9	201-254-7	> 1- < 3 %	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
Cumene 98-82-8	202-704-5	> 0,1- < 0,9 %	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
Cumene hydroperoxide 80-15-9	201-254-7	> 1 - < 3 %	T - Toxic; R23 Xn - Harmful; R21/22, R48/20/22 O - Oxidizing; R7 C - Corrosive; R34 N - Dangerous for the environment; R51, R53
Cumene 98-82-8	202-704-5	> 0,1 - < 0,9 %	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

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.

Eye 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

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.

6. Accidental release measures

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

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°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):
Anaerobic

8. Exposure controls/personal protection

Control parameters:
Valid for
Great Britain

Ingredient	ppm	mg/m^3	Type	Category	Remarks
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; >= 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.

9. Physical and chemical properties

Information on basic physical and chemical properties:

Appearance	liquid purple
Odor	characteristic
pH ()	3,00 - 6,00
Initial boiling point	> 150 °C (> 302 °F)
Flash point	> 100 °C (> 212 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure (25 °C (77 °F))	< 0,1300000 mbar
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
Solubility (qualitative) (Solvent: Water)	Slight
Solubility (qualitative) (Solvent: Acetone)	Miscible
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

10. Stability and reactivity

Reactivity:
Peroxides.

Chemical stability:
Stable under recommended storage conditions.

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.

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.

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.

Ecotoxicity:
No data available for the product.

Mobility:
Cured adhesives are immobile.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
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)
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
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					
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)

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) < 3 %

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 Toxic to aquatic organisms.
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.
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.