

MSDS-No.: 153501 Revision: 15.11.2006 printing date: 14.02.2007

Loctite 319

1. Identification of the substance/preparation and of the company/undertaking

Loctite 319

Intended use:

Anaerobic

Company name:

Henkel Ireland Limited Product Safety & Regulatory Affairs Tallaght Business Park, Whitestown Dublin 24

+353 (14046444) Phone: Fax-no.: +353 (14510806)

Ireland

Emergency information: +353-1-4599301/+353-87-2629625/+353-1-4046444

2. Composition / information on ingredients

Declaration of ingredients according to 91/155/EC:

Hazardous components CAS-No.	EINECS	content	Classification
Hydroxypropyl methacrylate 27813-02-1	248-666-3	20 - 30 %	Xi - Irritant; R36, R43
Acrylic acid 79-10-7	201-177-9	1 - < 5 %	R10 Xn - Harmful; R20/21/22 C - Corrosive; R35 N - Dangerous for the environment; R50
Methylacrylic acid 79-41-4	201-204-4	1 - < 5 %	Xn - Harmful; R21/22 C - Corrosive; R35
Cumene hydroperoxide 80-15-9	201-254-7	0,1 - 1 %	O - Oxidizing; R7 T - Toxic; R23 Xn - Harmful; R21/22, R48/20/22 C - Corrosive; R34 N - Dangerous for the environment; R51, R53
Cumene 98-82-8	202-704-5	0,1 - 1 %	R10 Xn - Harmful; R65 Xi - Irritant; R37 N - Dangerous for the environment; R51, R53

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3. Hazards identification

Non corrosive to skin in accordance with the in vitro test method, B40 Skin Corrosion - Human skin model assay, specified in Part B of Annex V to Directive 67/548/EEC.

R41 Risk of serious damage to eyes.

R37/38 Irritating to respiratory system and skin.

R43 May cause sensitization by skin contact.

4. 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.

Eve 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.

5. Fire-fighting measures

Suitable extinguishing media:

carbon dioxide, foam, powder

Special protection equipment for firefighters:

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

Hazardous combustion products:

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

6. Accidental release measures

Personal precautions:

Avoid skin and eye contact.

Environmental precautions:

Do not let product enter drains.

Clean-up methods:

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.

7. Handling and storage

Handling:

Use only in well-ventilated areas.

Avoid skin and eye contact.

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

Storage:

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.

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8. Exposure controls / personal protection

Components with specific control parameters for workplace:

Valid for

Great Britain

Basis

Occupational Exposure Limits

Ingredient	ppm	mg/m ³	Туре	Category	Remarks
methacrylic acid; 2-methylpropenoic acid 79-41-4	20	72	Time Weighted Average (TWA).		EH40 WEL
	40	143	Short Term Exposure Limit (STEL):		EH40 WEL
				Listed.	EH40 WEL
cumene 98-82-8	20	100	Time Weighted Average (TWA).		EU-2000/39/EC
	50	250	Short Term Exposure Limit (STEL):		EU-2000/39/EC
			Skin designation.	Can be absorbed through the skin.	EU-2000/39/EC
	25	125	Time Weighted Average (TWA).		EH40 WEL
	50	250	Short Term Exposure Limit (STEL):		EH40 WEL
			Skin designation.	Can be absorbed through the skin.	EH40 WEL

Respiratory protection:

Use only in well-ventilated areas.

Hand protection:

The use of chemical resistant gloves such as Nitrile are recommended

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced

Eye protection:

Wear protective glasses.

Body protection:

Wear suitable protective clothing.

General protection and hygiene measures:

Good industrial hygiene practices should be observed

9. Physical and chemical properties

Appearance liquid amber Odor: sharp

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

Vapor pressure <4 mbar

(20 °C (68 °F)) ensity 1,05 g/cm3

Density 1,05 g/cm
()
Solubility (qualitative) insoluble

(Solvent: water)
VOC content < 6,00 %

(2004/42/EC)

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10. Stability and reactivity

Conditions to avoid:

Stable

Materials to avoid:

Reaction with strong acids. Reacts with strong oxidants. Reaction with strong bases

11. Toxicological information

Oral toxicity:

May cause irritation to the digestive tract.

Inhalative toxicity:

Irritating to respiratory system

Skin irritation:

Irritating to the skin

Eye irritation:

Risk of serious damage to eyes

Sensitizing:

May cause sensitization by skin contact.

12. Ecological information

Mobility:

Cured adhesives are immobile.

General ecological information:

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

13. Disposal considerations

Product

Disposal methods:

Dispose of in accordance with local and national regulations.

Waste code():

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

Packaging

Disposal methods:

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.

14. Transport information

General information:

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

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15. Regulations - classification and identification

Indication of danger:

Xi - Irritant



Contains

Hydroxypropyl methacrylate, Acrylic acid, Methylacrylic acid

Risk phrases:

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitization by skin contact.

Safety phrases:

\$24/25 Avoid contact with skin and eyes.

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

S28 After contact with skin, wash immediately with plenty of water.

S37/39 Wear suitable gloves and eye/face protection.

16. Other information

Full text of the R-phrases indicated by codes in this safety data sheet. The labeling of the product is indicated in Section 15.

R10 Flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R21/22 Harmful in contact with skin and if swallowed.

R23 Toxic by inhalation.

R34 Causes burns.

R35 Causes severe burns.

R36 Irritating to eyes.

R37 Irritating to respiratory system.

R43 May cause sensitization by skin contact.

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

R50 Very toxic to aquatic organisms.

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.

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.

Material Safety Data Sheet according to 91/155/EC - ISO 11014-1



Loctite 7649

MSDS-No.: 153557 V001.2 Revision: 15.05.2006

printing date: 07.12.2006

1. Identification of the substance/preparation and of the company/undertaking

Trade name:

Loctite 7649

Intended use:

activator

Company name:

Henkel KGaA Standort München Gutenbergstraße 3 85748 Garching Germany

Emergency information:

+353-1-4599301/+353-87-2629625/+353-1-4046444

2. Composition / information on ingredients

General chemical description:

Solvent based activator

Declaration of ingredients according to 91/155/EC:

Hazardous components CAS-No.	EINECS	content	Classification
Acetone 67-64-1	200-662-2	80 - 100 %	F - Highly flammable; R11 Xi - Irritant; R36
			R66 R67

3. Hazards identification

R11 Highly flammable.

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

4. 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.

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Ingestion:

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

Seek medical advice.

5. Fire-fighting measures

Suitable extinguishing media:

carbon dioxide, foam, powder

Special protection equipment for firefighters:

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

Hazardous combustion products:

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

Additional information:

In case of fire, keep containers cool with water spray.

6. Accidental release measures

Personal precautions:

Avoid skin and eye contact.

Ensure adequate ventilation.

Environmental precautions:

Do not let product enter drains.

Clean-up methods:

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.

7. Handling and storage

Handling:

Use only in well-ventilated areas

Vapours should be extracted to avoid inhalation

Keep away from sources of ignition - no smoking.

Storage:

Store in a cool, well-ventilated place.

Keep away from heat and direct sunshine.

8. Exposure controls / personal protection

Respiratory protection:

Use only in well-ventilated areas.

Hand protection:

The use of chemical resistant gloves such as Neoprene or Natural Rubber are recommended

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced

Eye protection:

Wear protective glasses.

Body protection:

Wear suitable protective clothing

General protection and hygiene measures:

Good industrial hygiene practices should be observed

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9. Physical and chemical properties

Appearance liquid green
Odor: Acetone

pH-value not applicable Boiling point $56 \,^{\circ}\text{C} \, (132,8 \,^{\circ}\text{F})$ Flash point $-20 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F})$ Vapor pressure $(20 \,^{\circ}\text{C} \, (68 \,^{\circ}\text{F}))$

Density 0,7936 g/cm3

Solubility (qualitative) miscible

(Solvent: water)
Evaporation rate: 1,9

(Ether = 1)

Ignition temperature 465 °C (869 °F)

VOC content 99 % (As defined in the Council Directive 1999/13/EC)

(1999/13/EC)

10. Stability and reactivity

Conditions to avoid:

Stable

Materials to avoid:

Reacts with strong oxidants.

Hazardous decomposition products:

Irritating organic vapours

11. Toxicological information

Oral toxicity:

This material is considered to have low toxicity if swallowed

Inhalative toxicity:

May cause headache and dizziness.

Skin irritation:

Solvent may remove essential oils from the skin making it susceptible to attack from other chemicals

Eye irritation:

Irritating to eyes

12. Ecological information

Ecotoxicity:

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

Mobility:

The product evaporates readily.

Persistence and Biodegradability:

No data available.

Bioaccumulative potential:

No data available.

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13. Disposal considerations

Product

Disposal methods:

Dispose of in accordance with local and national regulations

Waste code(EWC):

14 06 03 - other solvents and solvent mixtures

Packaging

Disposal methods:

Disposal must be made according to official regulations.

14. Transport information

Road transport ADR:

Class: 3
Packaging group: II
Classification code: F1
Hazard ident. number: 33
UN no.: 1090
Label: 3

Technical name: ACETONE (solution)

Railroad transport RID:

Class: 3
Packaging group: II
Classification code: F1
Hazard ident. number: 33
UN no.: 1090
Label: 3

Technical name: ACETONE (solution)

Inland water transport ADN:

Class: 3
Packaging group: II
Classification code: F1
Hazard ident. number: 33
UN no.: 1090
Label: 3

Technical name: ACETONE (solution)

Marine transport IMDG:

 Class:
 3

 Packaging group:
 II

 UN no.:
 1090

 Label:
 3

 EmS:
 F-E ,S-D

Seawater pollutant:

Proper shipping name: ACETONE (solution)

Air transport IATA:

Class: 3
Packaging group: II
Packaging instructions (passenger) 305
Packaging instructions (cargo) 307
UN no.: 1090
Label: 3

Proper shipping name: Acetone (solution)

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15. Regulations - classification and identification

Indication of danger:

F - Highly flammable

Xi - Irritant





Risk phrases:

R11 Highly flammable.

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

Safety phrases:

S16 Keep away from sources of ignition - No smoking.

S23 Do not breathe vapour.

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

S37 Wear suitable gloves.

S51 Use only in well-ventilated areas.

16. Other information

Full text of the R-phrases indicated by codes in this safety data sheet. The labeling of the product is indicated in Section 15.

R11 Highly flammable.

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

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.

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