

Loctite CorporationEnvironmental Health & Safety Affairs
Health & Regulatory Affairs - EuropeHenkel Loctite Adhesives Ltd
Watchmead
Welwyn Garden City
Hertfordshire AL7 1JB

This safety data sheet has been prepared in accordance with the requirements of EC Directive 88/379/EEC and 91/155/EEC (and other related directives) and provides information relating to the safe handling and use of the product.

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1. PRODUCT AND COMPANY INFORMATION

Product Code 0120648
Trade Name 648
Manufacturer/Supplier Loctite UK
Address Watchmead,
Welwyn Garden City,
Herts., AL71JB.
Phone Number 01 707 358800
Fax Number 01 707 371696.
Emergency Phone Number +353-1-4599301/+353-87-2629625/+353-1-4046444

2. COMPOSITION / INFORMATION ON INGREDIENTS

Nature Dimethacrylate urethane diol based sealant.

Hazardous Components in Product for EC

| Component Name | CAS / EINEC | Concentration | R Phrases | Classification |
|----------------------------|--|-----------------------|---|----------------|
| 1-Acetyl-2-phenylhydrazine | 114-83-0 204-055-3 | 0.01 - 1.00 | R20/21/22, R40, R38, R43 | Xn |
| Hydroxypropyl Methacrylate | 27813-02-1 666-3 | 248- 2.50 - 10.00 | R36, R43 | Xi |
| Acrylic acid | 79-10-7 9 | 201-177- 2.50 - 10.00 | R10, R20/21/22, R35, R50 | C, N |
| Cumene Hydroperoxide 80% | 80-15-9 254-7 | 201- 1.00 - 3.00 | R7, R21/22, R23, R34, R48/20/22, R51/53 | O, T, N |
| R10 | R10 Flammable. | | | |
| R20/21/22 | R20/21/22 Harmful by inhalation, in contact with skin and if swallowed. | | | |
| R21/22 | R21/22 Harmful in contact with skin and if swallowed. | | | |
| R23 | R23 Toxic by inhalation. | | | |
| R34 | R34 Causes burns. | | | |
| R35 | R35 Causes severe burns. | | | |
| R36 | R36 Irritating to eyes. | | | |
| R38 | R38 Irritating to skin. | | | |
| R40 | R40 Limited evidence of a carcinogenic effect. | | | |
| R43 | R43 May cause sensitisation by skin contact. | | | |
| R48/20/22 | R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. | | | |
| R50 | R50 Very toxic to aquatic organisms. | | | |
| R51/53 | R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. | | | |
| R7 | R7 May cause fire. | | | |

3. HAZARD IDENTIFICATION

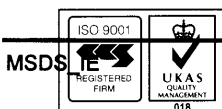
Risk of serious damage to eyes.
Irritating to respiratory system and skin.
May cause sensitisation by skin contact.

4. FIRST AID MEASURES**First Aid - Inhalation**

Remove patient to fresh air and seek medical attention.

First Aid - Skin

Remove contaminated clothing. Immediately wash skin thoroughly with soap and water. Obtain medical attention if irritation persists.



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4. FIRST AID MEASURES**First Aid - Eyes**

Flush eyes immediately with plenty of water for at least 15 minutes. Seek medical attention immediately.

First Aid - Ingestion

Rinse mouth with water then give plenty of water to drink. Do not induce vomiting. Seek medical advice.

5. FIRE FIGHTING MEASURES

Non flammable product (flash point is greater than 100°C (CC)). Trace amounts of toxic fumes may be released on incineration and the use of breathing apparatus is recommended. If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Self contained breathing apparatus should be worn when dealing with fire.

6. ACCIDENTAL RELEASE MEASURES

Wear gloves and eye protection. For large spills absorb onto inert absorbent material and place in sealed container for disposal. For small spills wipe up with paper towel and place in container for disposal.

7. HANDLING AND STORAGE**Handling**

Loctite applicators are recommended to minimise skin contact, particularly where workers are handling sharp or threaded parts which might result in microlaceration of sensitive areas of the skin. Avoid contact with skin and eyes. Adequate ventilation is recommended to remove traces of odour.

Storage

Store in original containers at 8°C-21°C and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Occupational exposure limits****Acrylic acid**HSA (1999) C.O.P : OEL 10ppm (30mg/m³) 8h TWA.HSA (1999) C.O.P : OEL 20ppm (60mg/m³) 15 min exposure limit.

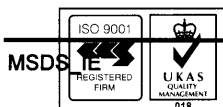
ACGIH: TLV 2ppm 8h TWA.

Avoid contact with skin and eyes. Do not breathe vapour.

In circumstances where there is a potential for prolonged or repeated skin contact, the use of polyvinyl chloride or nitrile rubber gauntlets or equivalent solvent resistant gloves is recommended. Safety glasses should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|--------------------------|
| Physical State | Liquid. |
| Colour | Green. |
| Odour | Sharp. |
| pH | Not determined. |
| Boiling Range/Point (°C) | Not determined. |
| Flash Point (CC) (°C) | > 100°C |
| Specific Gravity | 1.05 g/cm ³ . |
| Solubility in Water (kg/m³) | Immiscible. |
| Solubility in Acetone | Miscible |



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9. PHYSICAL AND CHEMICAL PROPERTIES

Vapour Pressure (mmHg @25°C) Less than 3 at 20 °C.

Explosion Limits (%) No data.

10. STABILITY AND REACTIVITY

Non reactive to oxidising agents except for peroxides. Non reactive to water.
 Polymerisation may occur after some time in the absence of air and/or the presence of a metal;
 Destabilised by reducing agents.

11. TOXICOLOGICAL INFORMATION**Inhalation**

Irritating to respiratory system.

Skin

This material is both irritating and sensitising to skin. Prolonged or continuous skin contact should be avoided.

Eyes

This product may cause severe damage to the eyes.

Ingestion

This product is considered to be of low toxicity having an acute oral LD50 (rat) >5000mg/kg by analogy to other similar products.

12. ECOLOGICAL INFORMATION

Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Standard procedures for 'water insoluble' non-toxic chemicals recommended.

14. TRANSPORT INFORMATION

| | |
|------------------------------|-----------------|
| UN Number | None |
| Air (IATA) | Not classified. |
| Sea (IMO) | Not classified. |
| Road (ADR)/Rail (RID) | Not classified. |

15. REGULATORY INFORMATION**Contains**

Acrylic acid.
 Hydroxypropyl Methacrylate
 Cumene Hydroperoxide

Labelling Information

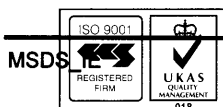
Irritant

R phrases

R41 Risk of serious damage to eyes.
 R37/38 Irritating to respiratory system and skin.
 R43 May cause sensitisation by skin contact.

S phrases

S24/25 Avoid contact with skin and eyes.



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Fax 01707 358900Email loctite@henkel.co.uk**15. REGULATORY INFORMATION****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 soap and water.**S37/39** Wear suitable gloves and eye/face protection.**S51** Use only in well ventilated areas.**Voluntary Labelling**

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16. OTHER INFORMATION

| | |
|--------------------------|------------------|
| MSDS first issued | 1 June 1995 |
| MSDS data revised | 2 September 2002 |

Prepared by:

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Health & Regulatory Affairs - Europe

Further Information may be obtained from:-

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The information in this safety data sheet was obtained from reputable sources and to the best of our knowledge is accurate and current at the mentioned date.

Neither Loctite nor its subsidiary companies accept any liability arising out of the use of the information provided here or the use, application or processing of the product(s) described herein. Attention of users is drawn to the possible hazards from improper use of the product(s).

This safety data sheet was prepared in accordance with Commission Directive 2001/59/EC adapting to technical progress for the 28th time Council Directive 67/548/EEC.

Supersedes Safety Data Sheet No: 14.00 dated 15.11.2001.