



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

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Loctite Super Glue precision max

SDS No.: 436571

V002.2

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Replaces version from: 27.11.2014

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

1.1. Product identifier

Loctite Super Glue precision max

Contains:

Ethyl 2-cyanoacrylate

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

Intended use:

Super glue

ua-productsafety.uk@uk.henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY- Email: technical.services@henkel.co.uk

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Skin irritation

Category 2

H315 Causes skin irritation.

Serious eye irritation

Category 2

H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure

Category 3

H335 May cause respiratory irritation.

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word:

Warning

Hazard statement:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Supplemental information EUH202 Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

Precautionary statement: P261 Avoid breathing vapours.
P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing.

2.3. Other hazards

Persons suffering from allergic reactions to acrylates should avoid contact with the product.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Cyanoacrylate Adhesive

Base substances of preparation:

Cyanoacrylate

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

| Hazardous components CAS-No. | EC Number REACH-Reg No. | content | Classification |
|---|-------------------------------|---------------|--|
| Ethyl 2-cyanoacrylate 7085-85-0 | 230-391-5 01-2119527766-29 | > 80- < 95 % | Eye Irrit. 2 H319 STOT SE 3 H335 Skin Irrit. 2 H315 |
| Hydroquinone 123-31-9 | 204-617-8 01-2119524016-51 | < 0,1 % | Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Carc. 2 H351 Muta. 2 H341 Acute Tox. 4; Oral H302 Eye Dam. 1 H318 Skin Sens. 1 H317 M factor: 10 |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | 204-327-1 01-2119496065-33 | >= 0,1- < 1 % | Repr. 2 H361 Aquatic Chronic 4 H413 |

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.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of adverse health effects seek medical advice.

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Do not pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, preferably after soaking in warm soapy water.

Cyanoacrylates give off heat on solidification. In rare cases a large drop will generate enough heat to cause a burn.

Burns should be treated normally after the adhesive has been removed from the skin.

If lips are accidentally stuck together apply warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth.

Peel or roll lips apart. Do not try to pull the lips apart with direct opposing action.

Eye contact:

If the eye is bonded closed, release eyelashes with warm water by covering with wet pad.

Cyanoacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive.

Keep eye covered until debonding is complete, usually within 1-3 days.

Do not force eye open. Medical advice should be sought in case solid particles of cyanoacrylate trapped behind the eyelid cause any abrasive damage.

Ingestion:

Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth (several hours).

4.2. Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

SKIN: Redness, inflammation.

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, water spray jet, fine water spray

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

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.

5.3. Advice for firefighters

Wear protective equipment.

Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Avoid contact with skin and eyes.

Danger of slipping on spilled product.

Wear protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Remove with liquid-absorbing material (sand, peat, sawdust).

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Open and handle container with care.
Avoid skin and eye contact.
Ensure that workrooms are adequately ventilated.

Hygiene measures:

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 a cool place, max. storage temperature 30°C.
Store in a dry place.
Keep container tightly sealed and store in a frost free place.
For optimum shelf life store in original containers under refrigerated conditions at 2 - 8°C (35.6 - 46.4 °F)
Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

7.3. Specific end use(s)

Super glue

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational Exposure Limits**

Valid for
Great Britain

| Ingredient [Regulated substance] | ppm | mg/m ³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|---|-----|-------------------|-----------------------------------|--|-----------------|
| Ethyl 2-cyanoacrylate 7085-85-0 [ETHYL CYANOACRYLATE] | 0,3 | 1,5 | Short Term Exposure Limit (STEL): | | EH40 WEL |

Predicted No-Effect Concentration (PNEC):

| Name on list | Environmental Compartment | Exposure period | Value | | | | Remarks |
|--------------------------|------------------------------------|-----------------|-------|-----|-------|--------------|---------|
| | | | mg/l | ppm | mg/kg | others | |
| Hydroquinone 123-31-9 | aqua (freshwater) | | | | | 0,114 µg/L | |
| Hydroquinone 123-31-9 | aqua (marine water) | | | | | 0,0114 µg/L | |
| Hydroquinone 123-31-9 | sediment (freshwater) | | | | | 0,98 µg/kg | |
| Hydroquinone 123-31-9 | sediment (marine water) | | | | | 0,097 µg/kg | |
| Hydroquinone 123-31-9 | aqua (intermittent releases) | | | | | 0,00134 mg/L | |
| Hydroquinone 123-31-9 | soil | | | | | 0,129 µg/kg | |
| Hydroquinone 123-31-9 | STP | | | | | 0,71 mg/L | |

Derived No-Effect Level (DNEL):

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|------------------------------------|--------------------|-------------------|---------------------------------------|---------------|------------------------|---------|
| Ethyl 2-cyanoacrylate 7085-85-0 | Workers | Inhalation | Long term exposure - local effects | | 9,25 mg/m ³ | |
| Ethyl 2-cyanoacrylate 7085-85-0 | Workers | Inhalation | Long term exposure - systemic effects | | 9,25 mg/m ³ | |
| Ethyl 2-cyanoacrylate 7085-85-0 | general population | Inhalation | Long term exposure - local effects | | 9,25 mg/m ³ | |
| Ethyl 2-cyanoacrylate 7085-85-0 | general population | Inhalation | Long term exposure - systemic effects | | 9,25 mg/m ³ | |
| Hydroquinone 123-31-9 | Workers | Dermal | Long term exposure - systemic effects | | 128 mg/kg bw/day | |
| Hydroquinone 123-31-9 | Workers | Inhalation | Long term exposure - systemic effects | | 7 mg/m ³ | |
| Hydroquinone 123-31-9 | Workers | Inhalation | Long term exposure - local effects | | 1 mg/m ³ | |
| Hydroquinone 123-31-9 | general population | Dermal | Long term exposure - systemic effects | | 64 mg/kg bw/day | |
| Hydroquinone 123-31-9 | general population | Inhalation | Long term exposure - systemic effects | | 1,74 mg/m ³ | |
| Hydroquinone 123-31-9 | general population | Inhalation | Long term exposure - local effects | | 0,5 mg/m ³ | |

Biological Exposure Indices:

None

8.2. Exposure controls:**Respiratory protection:**

Suitable breathing mask when there is inadequate ventilation.

Combination filter: ABEKP

This recommendation should be matched to local conditions.

Hand protection:

Recommended are gloves made from Nitril rubber (Material thickness >0,1 mm, Perforation time < 30s).Gloves should be replaced after each short time contact or contamination. Available at laboratory specialized trade or at pharmacies / chemist's shops.

In the case of longer contact protective gloves made from nitrile rubber are recommended according to EN 374.

Perforation time > 30 minutes

material thickness > 0.4 mm

In the case of longer and repeated contact please note that in practice the penetration times may be considerably shorter than those determined according to EN 374. The protective gloves must always be checked for their suitability for use at the specific workplace (e.g. mechanical and thermal stress, product compatibility, antistatic effects, etc.). The gloves must be replaced immediately at the first signs of wear and tear. The information provided by the manufacturers and given in the relevant trade association regulations for industrial safety must always be observed. We recommend that a hand care plan is drawn up in cooperation with a glove manufacturer and the trade association in accordance with the local operating conditions.

Eye protection:

Goggles which can be tightly sealed.

Skin protection:

Suitable protective clothing

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|--|--|
| Appearance | liquid colourless |
| Odor | irritating |
| Odour threshold | No data available / Not applicable |
| pH | No data available / Not applicable |
| Initial boiling point | > 100 °C (> 212 °F) |
| Flash point | 80,0 - 93,4 °C (176 - 200.12 °F); Tagliabue closed cup |
| Decomposition temperature | No data available / Not applicable |
| Vapour pressure (25 °C (77 °F)) | < 0,5 mbar |
| Density | No data available / Not applicable |
| 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) | Polymerises in presence of water. |
| 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 |

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity**10.1. Reactivity**

Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

None if used for intended purpose.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

None known.

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.

Persons suffering from allergic reactions to acrylates should avoid contact with the product.

STOT-single exposure:

May cause respiratory irritation.

Skin irritation:

Causes 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 |
|---|------------|----------------|----------------------|---------------|---------|--|
| Ethyl 2-cyanoacrylate 7085-85-0 | LD50 | > 5.000 mg/kg | oral | | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| Hydroquinone 123-31-9 | LD50 | 367 mg/kg | oral | | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | LD50 | > 10.000 mg/kg | oral | | rat | |

Acute dermal toxicity:

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|------------------------------------|------------|---------------|----------------------|---------------|---------|--|
| Ethyl 2-cyanoacrylate 7085-85-0 | LD50 | > 2.000 mg/kg | dermal | | rabbit | OECD Guideline 402 (Acute Dermal Toxicity) |

Skin corrosion/irritation:

| Hazardous components CAS-No. | Result | Exposure time | Species | Method |
|------------------------------------|---------------------|---------------|---------|--|
| Ethyl 2-cyanoacrylate 7085-85-0 | slightly irritating | 24 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |

Serious eye damage/irritation:

| Hazardous components CAS-No. | Result | Exposure time | Species | Method |
|------------------------------------|------------|---------------|---------|---|
| Ethyl 2-cyanoacrylate 7085-85-0 | irritating | 72 h | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |

Respiratory or skin sensitization:

| Hazardous components CAS-No. | Result | Test type | Species | Method |
|------------------------------------|-----------------|------------------------------|------------|--------|
| Ethyl 2-cyanoacrylate 7085-85-0 | not sensitising | | guinea pig | |
| Hydroquinone 123-31-9 | sensitising | Guinea pig maximisation test | guinea pig | |

Germ cell mutagenicity:

| Hazardous components CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|---|----------|--|--------------------------------------|---------|--|
| Ethyl 2-cyanoacrylate 7085-85-0 | negative | bacterial reverse mutation assay (e.g Ames test) | | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| | negative | in vitro mammalian chromosome aberration test | with and without | | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| Hydroquinone 123-31-9 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | EU Method B.13/14 (Mutagenicity) |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |

Reproductive toxicity:

| Hazardous substances CAS-No. | Result / Classification | Species | Exposure time | Species | Method |
|---|-------------------------|------------------------|---------------|---------|---|
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | NOAEL P = 12,5 mg/kg | screening oral: gavage | | rat | OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test) |

Repeated dose toxicity

| Hazardous components CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Method |
|------------------------------|-------------------------|----------------------|--|---------|--|
| Hydroquinone 123-31-9 | NOAEL= \geq 250 mg/kg | oral: gavage | 14 days 5 days/week. 12 doses | rat | OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents) |
| Hydroquinone 123-31-9 | LOAEL= \leq 500 mg/kg | oral: gavage | 14 days 5 days/week. 12 doses | rat | OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents) |

SECTION 12: Ecological information**General ecological 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.

Do not empty into drains, soil or bodies of water.

12.1. Toxicity

| Hazardous components CAS-No. | Value type | Value | Acute Toxicity Study | Exposure time | Species | Method |
|------------------------------|------------|-------------|----------------------|---------------|--|--|
| Hydroquinone 123-31-9 | LC50 | 0,638 mg/l | Fish | 96 h | Oncorhynchus mykiss | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Hydroquinone 123-31-9 | EC50 | 0,134 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Hydroquinone 123-31-9 | EC50 | 0,335 mg/l | Algae | 72 h | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Hydroquinone 123-31-9 | NOEC | 0,0057 mg/l | chronic Daphnia | 21 d | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |

12.2. Persistence and degradability

| Hazardous components CAS-No. | Result | Route of application | Degradability | Method |
|---|--|-------------------------|---------------|---|
| Ethyl 2-cyanoacrylate 7085-85-0 | | aerobic | 57 % | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |
| Hydroquinone 123-31-9 | readily biodegradable | aerobic | 75 - 81 % | EU Method C.4-E (Determination of the "Ready" Biodegradability: Closed Bottle Test) |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | under test conditions no biodegradation observ | | 0 % | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |

12.3. Bioaccumulative potential / 12.4. Mobility in soil

| Hazardous components CAS-No. | LogKow | Bioconcentration factor (BCF) | Exposure time | Species | Temperature | Method |
|---|--------|----------------------------------|------------------|---------|-------------|---------------------------------------|
| Ethyl 2-cyanoacrylate 7085-85-0 | 0,776 | | | | 22 °C | EU Method A.8 (Partition Coefficient) |
| Hydroquinone 123-31-9 | 0,59 | | | | | EU Method A.8 (Partition Coefficient) |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | 6,24 | | | | | |

12.5. Results of PBT and vPvB assessment

| Hazardous components CAS-No. | PBT/vPvB |
|---|---|
| Hydroquinone 123-31-9 | Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria |
| Bis(2-hydroxy-3-tert-butyl-5-methylphenyl)methane 119-47-1 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Product disposal:

Dispose of waste and residues in accordance with local authority requirements.

Disposal of uncleaned packages:

Use packages for recycling only when totally empty.

Waste code

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

SECTION 14: Transport information**14.1. UN number**

| | |
|------|---------------------|
| ADR | Not dangerous goods |
| RID | Not dangerous goods |
| ADN | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | 3334 |

14.2. UN proper shipping name

| | |
|------|---|
| ADR | Not dangerous goods |
| RID | Not dangerous goods |
| ADN | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | Aviation regulated liquid, n.o.s. (Cyanoacrylate ester) |

14.3. Transport hazard class(es)

| | |
|------|---------------------|
| ADR | Not dangerous goods |
| RID | Not dangerous goods |
| ADN | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | 9 |

14.4. Packaging group

| | |
|------|---------------------|
| ADR | Not dangerous goods |
| RID | Not dangerous goods |
| ADN | Not dangerous goods |
| IMDG | Not dangerous goods |
| IATA | III |

14.5. Environmental hazards

| | |
|------|----------------|
| ADR | not applicable |
| RID | not applicable |
| ADN | not applicable |
| IMDG | not applicable |
| IATA | not applicable |

14.6. Special precautions for user

| | |
|------|---|
| ADR | not applicable |
| RID | not applicable |
| ADN | not applicable |
| IMDG | not applicable |
| IATA | Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted. |

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 | 0,00 % |
| (VOCV 814.018 VOC regulation CH) | |

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

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:

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H341 Suspected of causing genetic defects.
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H413 May cause long lasting harmful effects to aquatic life.

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.

Label elements (DPD):

Xi - Irritant



Risk phrases:

R36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

- S2 Keep out of the reach of children.
- S23 Do not breathe vapour.
- S24/25 Avoid contact with skin and eyes.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Additional labeling:

Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

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.

Annex - Exposure Scenarios:

Exposure Scenarios for ethyl 2-cyanoacrylate can be downloaded under the following link:

http://mymsds.henkel.com/mymsds/.470833..en.ANNEX_DE.15743123.0.DE.pdf

Alternatively they can be accessed on the internet site www.mymsds.henkel.com by entering number 470833.

