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

<table>
<thead>
<tr>
<th>Product name and description</th>
<th>Cyanoacrylate adhesive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name/Brand</td>
<td>Super glue®</td>
</tr>
<tr>
<td>Synonym(s)</td>
<td>None</td>
</tr>
<tr>
<td>REACH Number</td>
<td>Not applicable, mixture</td>
</tr>
<tr>
<td>CAS Number</td>
<td>Not applicable, mixture</td>
</tr>
<tr>
<td>EC Number</td>
<td>Not applicable, mixture</td>
</tr>
</tbody>
</table>

Recommended use

This product is intended for use as a household adhesive.

Uses advised against

None

Supplier of the product and of this safety data sheet

National Centre for Biotechnology Education (NCBE)
University of Reading
2 Earley Gate
Whiteknights
READING
RG6 6AU
United Kingdom

T: 0118 9873743
F: 0118 9750140
E: NCBE@reading.ac.uk
W: www.ncbe.reading.ac.uk

Manufacturer of the product

The product is obtained from a variety of suppliers.

Emergency telephone number

0118 9873743 (NCBE, University of Reading. 08.30–17.00 weekdays only)
SECTION 2. Hazards identification

Classification according to Regulation (EC) No. 1272/2008 [CLP]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>EUH202</td>
<td>Contains cyanoacrylates.</td>
</tr>
</tbody>
</table>

Label elements

**WARNING**

- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.

Note: The following precautionary statements could be included on the label, but they are not required as the volume of the product is less than 125 ml.

- P264: Wash skin and hands thoroughly after handling.
- P280: Wear protective gloves/protective clothing/eye protection.
- P281: Avoid breathing vapours.
- P271: Use only outdoors or in a well-ventilated area.
- P233: Keep container tightly closed.
- P260: Do not breathe vapour.
- P210: Keep away from heat/open flames/hot surfaces. No smoking.
- P370 + P378: In case of fire: Use dry chemical, foam or carbon dioxide to extinguish.
- P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313: If eye irritation persists: Get medical advice/attention.
- P313: Get medical advice/attention.
- P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
- P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before reuse.
- P304 + P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
- P312: Call a POISON CENTRE or doctor/physician if you feel unwell.
- P501: Dispose of contents/container in accordance with local regulations.

Other hazards

None found.

SECTION 3. Composition/Information on the ingredients

<table>
<thead>
<tr>
<th>Name of component (Synonyms) [CLP index number]</th>
<th>Weight (%)</th>
<th>EC (EINECS) number</th>
<th>CAS number</th>
<th>REACH registration number</th>
<th>Classification under Regulation (EC) No 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl 2-cyanoacrylate [607-236-00-9]</td>
<td>85–100</td>
<td>230-391-5</td>
<td>7085-85-0</td>
<td>–</td>
<td>Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) Contains cyanoacrylates (EUH202)</td>
</tr>
<tr>
<td>Poly(methyl methacrylate)</td>
<td>10–30</td>
<td>–</td>
<td>9011-14-7</td>
<td>–</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

* Approximate values obtained from similar products.

For the full text of the safety classifications (H-statements), refer to Section 16.
SECTION 4. First aid measures

General information
Take great care when using this glue; it bonds skin in seconds. It may also cause eye and respiratory irritation.

Inhalation
Move the casualty to fresh air. Prolonged or repeated exposure may cause allergic reactions or asthma-like symptoms in sensitive individuals. If the victim has stopped breathing artificial respiration and/or oxygen may be necessary. If this happens, call a doctor immediately.

Skin contact
Bonds skin in seconds! Do not pull bonded skin apart. Soak with warm soapy water then gently peel apart using a blunt instrument. If the lips are bonded, apply warm water to the lips and encourage wetting and pressure from saliva in the mouth. Peel or roll the lips apart. Do not pull lips apart with direct opposing force. Cyanoacrylates generate heat on solidification. In rare circumstances, a large drop will burn the skin. If this happens, seek medical attention.

May cause skin irritation. Cyanoacrylates have been reported to cause an allergic reaction but due to rapid polymerization (solidification) at the skin surface, an allergic reaction is rare. Cured (solidified) adhesive does not present a health hazard even if bonded to the skin. Wash affected area with soap and water. Seek medical attention if irritation occurs.

Eye contact
Rinse eye immediately with running water (preferably warm) for at least 15 minutes. Cyanoacrylate will bond to the eye protein and cause excessive tear production. This will help to debond the adhesive. Keep the eye covered until debonding is complete (usually within 1–3 days). The eyelids may bond. If the eyelids are bonded closed, release eyelashes by covering with a pad soaked with warm water. Do not force the eye open. Seek medical advice, especially if there are solid particles of polymerised glue trapped behind the eyelid, as these may cause abrasive damage.

Ingestion
Ensure that the breathing passages are not obstructed. The glue rapidly solidifies and bonds to the mouth, making the glue almost impossible to swallow. Saliva will lift the adhesive in several hours. Avoid swallowing the solid adhesive after detachment. Not a toxic product and not expected to be harmful by ingestion.

Self-protection of the first aider
Ensure that you do not come into contact with the unpolymerised glue or breathe excessive amounts of vapour.

Most important symptoms and effects, both acute and delayed
See above. Avoid exposure to vapour concentration in confined areas. Frequent or prolonged exposure may irritate the skin and cause a rash (dermatitis).

Indication of any immediate medical attention and special treatment
If in contact with the eyes, flush with warm water immediately. Seek medical attention.

Advice to doctor
Treat symptomatically.
SECTION 5. Firefighting measures

The product is not flammable. Combustible liquid and vapour. The product is polymerised to a solid by water.

Extinguishing media
Use foam, carbon dioxide or dry chemical.

Special hazards arising from the substance or mixture
None.

Advice for firefighters
Trace amounts of toxic or irritating fumes may be released in a fire. The use of self-contained breathing apparatus is therefore recommended if the quantity of the substance involved warrants it.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
When necessary (e.g., when there is a large spill) use nitrile gloves to prevent skin contact. Do not use PVC, nylon or cotton materials. Avoid breathing vapour.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Prevent the product from entering drains.

Methods and material for containment and cleaning up
Do not use a cloth for mopping up. The product polymerises on contact with water: flood the area with water to complete polymerization and scrape the solid off the surface it has adhered to.

Reference to other sections
See Section 13 for disposal instructions.

SECTION 7. Handling and storage

Precautions for safe handling
Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Wash hands thoroughly after handling the product. Avoid contact with fabric and cellulose (e.g., cotton wool, paper, cotton fabric). Contact with these materials may cause rapid polymerization which can generate heat, smoke and strong irritating vapours and can cause burns.

Conditions for safe storage, including any incompatibilities
Store in the original packaging, tightly closed. Store in a cool (<24 °C) dry, well-ventilated location, away from sources of ignition. Storage in a fridge at 3–5 °C will prolong the life of the product. Keep out of reach of children.

Directions for use (as an adhesive)
1. The surfaces to be joined must be smooth, clean and dry.
2. Take off the cap and cut the tip of the nozzle. Be careful not to apply pressure to the tube when cutting the nozzle tip.
3. Apply glue to one surface (about 1 drop per 4 cm²).
4. Place the items to be joined together immediately and hold in place if necessary until the glue sets.

To keep the tip of the nozzle clear, ensure that the cap is replaced quickly and securely after use. Glue can be removed using an anti-bonding substance (not supplied).
SECTION 8. Exposure controls/personal protection

Control parameters

Exposure limits
Components with workspace control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Workplace exposure limit</th>
<th>Legal basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl 2-cyanoacrylate</td>
<td>7085-85-0</td>
<td>Short-term exposure limit (15 minute reference period)</td>
<td>0.3 ppm, 1.3 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values
Derived no effect level
Predicated no effect level

Exposure controls

Select personal protective equipment appropriate for the operations taking place. For example it may be sensible to wear eye protection and protective gloves when handling the glue. Avoid contact with eyes and skin. Handle in accordance with good laboratory hygiene and safety practice. Wash hands before breaks and after handling the mixture.

SECTION 9. Physical and chemical properties

Appearance
Physical state
Odour
Odour threshold
pH
Melting point / Range
Boiling point / Range
Flash point
Evaporation rate
Flammability (solid, gas)
Ignition temperature
Explosion limits
Vapour pressure
Vapour density
Density @ 20 °C
Relative density
Solubility in water
Solubility in other solvents
Partition coefficient: n-octanol/water
Autoignition temperature
Decomposition temperature
Viscosity
Explosive properties
Oxidising properties

Other information
No additional information relevant to the safe use of the substance.
SECTION 10. Stability and reactivity

Chemical stability
Stable under recommended storage conditions.

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

Conditions to avoid
Heat, flames. Temperatures above 80 °C.

Incompatible materials
Water, amines, alkalis and alcohols, cellulose (e.g., cotton or paper).

Hazardous decomposition products
Trace amounts of toxic or irritating fumes may be released in a fire.

SECTION 11. Toxicological information

Acute toxicity
LD50 Oral: > 5 000 mg/kg (Rat, estimated)
LD50 Dermal: > 2 000 mg/kg (Rabbit, estimated)

Skin corrosion/irritation: Mild skin irritation 24 hours (Rabbit)
Serious eye damage/eye irritation: Irritating to eyes 72 hours (Rabbit)

Chronic toxicity
No information available.

Additional toxicological information
No information available.

Carcinogenicity
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Sensitisation
Possible skin sensitiser.

Mutagenic effects
No information available.

Reproductive effects
No information available.

Developmental effects
No information available.

Target organs
No information available.

Endocrine disruptor information
No information available.

SECTION 12. Ecological information

Toxicity
No information available.

Persistence and degradability
No information available.

Bioaccumulative potential
No information available.

Mobility in soil
No information available.

Additional ecological information
No information available.

Results of PBT and vPvB assessment
Not applicable.

Other adverse effects
None known.

SECTION 13. Disposal considerations

Waste from residues/unused product
Cured (solid) glue can be disposed of as non-hazardous waste.

Contaminated packaging
Dispose of in normal waste according to local regulations.
SECTION 14. Transport information

UN number
ADR/RID: Not applicable.
IMDG: Not applicable.
IATA: UN3334.

UN proper shipping name
ADR/RID: Unrestricted.
IMDG: Unrestricted.
IATA: Aviation regulated liquids N.O.S. (Cyanoacrylate ester). Not more than 500 ml is unrestricted.

Transport hazard class(es)
ADR/RID: Not applicable.
IMDG: Not applicable.
IATA: 9

Packaging group
ADR/RID: Not applicable.
IMDG: Not applicable.
IATA: III

Environmental hazards
ADR/RID: None
IMDG: None
IATA: None

Conditions for safe storage
Keep the tubes of glue closed tightly. Store in a dry, cool and well-ventilated place.

SECTION 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations
No data available.

Chemical Safety Assessment
A chemical safety assessment was not carried out.

SECTION 16. Other information

Full text of GHS hazard statements

Keep out of the reach of children.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Revised on 26 June 2015 to add EU-specific hazard statement about cyanoacrylates (EUH202).

The information given in this Safety Data Sheet is based on the present state of our knowledge.

This Safety Data Sheet has been compiled and is solely intended for this product.

END OF SAFETY DATA SHEET