



SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: LOCTITE 435 Instant Adhesive

Use: Cyanoacrylate adhesive.

Supplier: HENKEL NEW ZEALAND LIMITED
2 ALLENS ROAD, EAST TAMAKI, AUCKLAND.
PHONE (09) 272 6710 FAX (09) 272 6711.

Emergency Contact Details: 0800 CHEMCALL (0800 243 622)
For any Hazardous Substance Emergency
(24 hours, 365 days)

SECTION 2. HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE:

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

HSNO CLASSIFICATION:

3.1D Combustible liquid.
6.3A Causes skin irritation.
6.4A Causes serious eye irritation.
6.8B Suspected of damaging fertility or the unborn child.

PRECAUTIONARY STATEMENTS:

PREVENTION:

P103 Read label before use.
P104 Read Safety Data Sheet before use.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from open flames and hot surfaces. No smoking.
P264 Wash hands, arms and face thoroughly after handling.
P280 Wear suitable protective equipment. Refer to Section 8.

RESPONSE:

P370+P378 In case of fire: Use appropriate media for extinction. See Section 5.
P302+P352 **IF ON SKIN:** Wash with plenty of soap and water.
P362 Take off contaminated clothing and wash before reuse.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for at least 15 minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P308+P313 If exposed or concerned: Get medical advice/attention.



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:

| CHEMICAL ENTITY | CAS NO. | PROPORTION |
|--------------------------|-------------|--------------|
| Ethyl cyanoacrylate | [7085-85-0] | 60-<100% w/w |
| Phthalic anhydride | [85-44-9] | <1.0% w/w |
| Remainder, not hazardous | | <10% w/w |

SECTION 4. FIRST AID MEASURES

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).

Skin: Do not pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, preferably after soaking affected area 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 fingers stick together, apply a solvent such as acetone to contact areas, then wash off with water. Do not use solvents near eyes or open wounds.
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.

Eyes: 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.

Inhalation: Move to fresh air, consult doctor if complaint persists.

Advice to doctor: Treat symptomatically.

First Aid facilities: Eye wash.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

Water fog, dry chemical, foam or carbon dioxide.

Hazardous decomposition products:

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO₂) can be released.

Precautions for fire fighters and special protective equipment:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA). In case of fire, keep containers cool with water spray.



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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Spills:** Avoid skin and eye contact. Ventilate area.
Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste. Do not allow product to enter drains.
- Disposal:** Cured material can be disposed of as non-hazardous waste.

SECTION 7. HANDLING AND STORAGE

- Safe Handling:** Observe recommendations made under SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Use in a well ventilated area. Handle carefully. This product will bond instantly in the presence of moisture.
- Storage:** Store indoors in a cool, dry and well-ventilated area. Keep containers sealed when not in use. Store in original containers. Protect from physical damage. For optimum shelf life store in original containers under refrigerated conditions at 2 - 8°C (35.6 - 46.4 °F)

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- Workplace Exposure Standards:** TWA: 1ppm (16.1mg/m3) Phthalic anhydride
- Engineering controls:** None required under normal conditions of use, but if exposure limits are exceeded, use a local mechanical exhaust system.
- Personal protective equipment:** Wear protective glasses.
The use of chemical resistant gloves such as Nitrile is recommended.
Polyethylene or polypropylene gloves are recommended when using large volumes.
Do not use PVC, nylon or cotton gloves.
Ensure adequate ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical data:**
- Appearance: Colourless liquid
Odour: Irritating
Specific gravity: 1.1 @ 20°C
Flash point (TCC): 80°C – 93.4°C

SECTION 10. STABILITY AND REACTIVITY

- Chemical stability:** Stable under recommended storage conditions.
- Conditions to avoid:** Avoid open flames and heat. Polymerisation will occur in the presence of moisture.
- Incompatible materials:** Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.
- Hazardous decomposition products:** Carbon oxides.



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SECTION 11. TOXICOLOGICAL INFORMATION

HEALTH EFFECTS:

Acute:

Ingestion: Not expected to be harmful by ingestion. Rapidly polymerizes (solidifies) and bonds in mouth. It is almost impossible to swallow.

Skin: Bonds skin in seconds. May cause skin irritation. Cyanoacrylates have been reported to cause allergic reaction but due to rapid polymerization at the skin surface, an allergic response is rare.
Cyanoacrylates generate heat on solidification. In rare circumstances a large drop will burn the skin. Cured adhesive does not present a health hazard even if bonded to the skin.

Eyes: Irritating to eyes. Causes excessive tearing. Eyelids may bond.

Inhalation: Exposure to vapors above the established exposure limit results in respiratory irritation, which may lead to difficulty in breathing and tightness in the chest.

Chronic: No data.

Toxicity information: Ethyl cyanoacrylate: Oral LD50 (rat): > 5000 mg/kg
Dermal LD50 (rabbit): > 2000 mg/kg
Phthalic anhydride: Oral LD50 (rat): 1530 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Potential Environmental Interactions: Biological and Chemical Oxygen Demands (BOD and COD) are insignificant. Do not empty into drains / surface water / ground water.

Toxicity: Phthalic anhydride: LC50 48 hr (Fish): 313 mg/L
EC50 72 hr (Algae): 68 mg/L

SECTION 13. DISPOSAL CONSIDERATIONS

Cured adhesive: Dispose of as water insoluble non-toxic solid chemical in authorised landfill or incinerate under controlled conditions. 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.

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.

SECTION 14. TRANSPORT INFORMATION

Land Transport:

Not classified as Dangerous Goods according to NZS 5433: 2012 and the Land Transport Rule: Dangerous Goods 2005.

Marine transport IMDG:

Not dangerous goods

Air transport IATA:



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| | |
|----------------------------------|---|
| UN no.: | 3334 |
| Proper shipping name: | Aviation regulated liquid, n.o.s. (Cyanoacrylate ester) |
| Class or division: | 9 |
| Packing group: | III |
| Packing instructions (passenger) | 964 |
| Packing instructions (cargo) | 964 |
| Additional Information: | Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted. |

SECTION 15. REGULATORY INFORMATION

HSNO Approval Code: HSR002657 - Surface Coatings and Colourants (Combustible) Group Standard 2006

Site and storage: Refer to the site and storage requirements for this Group Standard.

SECTION 16. OTHER INFORMATION

Abbreviations/acronyms:

HSNO - Hazardous Substances and New Organisms Act 1996
AS - Australian Standard
NZS - New Zealand Standard
TWA - Time-weighted average
STEL - Short-Term Exposure Limit
TCC - Tagliabue closed cup
NOS - Not Otherwise Specified
LD50 – the median lethal dose
LC50 - the median lethal concentration
EC50 – median effect concentration.
IMDG – International Maritime Dangerous Goods
IATA – International Air Transport Association

Reference(s):

1. Preparation of Safety Data Sheets: Approved Code of Practice Under the HSNO Act 1996, HSNO CoP 8-1 09-06, New Zealand Chemical Industry Council, September 2006.
2. Workplace Exposure Standards and Biological Exposure Indices, Ministry of Business, Innovation & Employment, February 2013, 7th ed.

DISCLAIMER:

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DATE OF SDS:

16.07.15

REVISION OF:

19.11.08

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