SAFETY DATA SHEET

SECTION 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **LOCTITE 406**

Proper Shipping Name: AVIATION REGULATED LIQUID, N.O.S. (Cyanoacrylate ester)
Note: Applicable for air transport only.

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.

PRECAUTIONARY STATEMENTS:

PREVENTION:

P103	Read label before use.
P104	Read Safety Data Sheet before use.
P210	Keep away from flames and hot surfaces
P264	Wash hands, arms and face thoroughly after handling.
P280	Wear suitable protective equipment. Refer to Section 8.

RESPONSE:

P302+P352	**IF ON SKIN:** Wash with plenty of soap and water.
P304+P312	**IF INHALED:** Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P321	Refer Section 4 of this Safety Data Sheet for more information.
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:

CHEMICAL ENTITY	CAS NO.	PROPORTION
Ethyl cyanoacrylate	[7085-85-0]	> 60% w/w

SECTION 4. FIRST AID MEASURES

Ingestion: For advice, contact a Poisons Information Centre or a doctor. 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: Remove affected person to fresh air. For all but the most minor symptoms, arrange for patient to be seen by a doctor.

Advice to doctor: Treat symptomatically.

First Aid facilities: Eye wash.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Dry powder, foam or carbon dioxide.

Hazardous decomposition products: Under fire conditions, it may release toxic fumes.

Precautions for fire fighters and special protective equipment: If there is a risk of exposure to products of combustion, fire-fighters should wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spills: Ventilate area. Do not use cloths for mopping up. Polymerise with water and scrape up. For large spills, wear protective gloves, chemical goggles and boots. Contain and collect spillage with

inert absorbent materials (e.g. sand, earth, vermiculite). Transfer to sealable containers suitable for storing spilled material. Wash areas in contact with spilled material with adequate warm soapy water to render the area safe for human contact. Note: Residues are not water soluble. Do not allow product to enter drains.

Disposal: Dispose of solid residues in waste disposal area in accordance with relevant Council and Government requirements.

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. Avoid contact with fabric or paper as contact with these materials can generate smoke and irritating vapours.

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°C -10°C.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National exposure standards: TWA: 0.2 ppm as for ethyl cyanoacrylate
Source: ACGIH

Engineering controls: None required under normal conditions of use, but if exposure limits are exceeded, use a local mechanical exhaust system.

Personal protective equipment: Avoid contact with skin and eyes. Wear overalls, polyethylene or nitrile rubber gloves and safety glasses with side shields. Do not use PVC, nylon or cotton gloves. Use with adequate ventilation. If inhalation risk exists, wear a respirator complying with the requirements of AS/NZS1715 and 1716.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical data:

Appearance:	Clear, colourless liquid.
Solubility:	Polymerises in the presence of water.
Specific gravity:	1.05@ 20°C
Odour:	Sharp, characteristic.
Flash Point (TCC):	80°C to 93°C

SECTION 10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions.
Conditions to avoid: Avoid open flames and heat.
Incompatible materials: Keep away from strong oxidising agents.
Hazardous decomposition products: Combustible material. In a fire, it may release toxic fumes.
Hazardous reactions: Exothermic polymerisation will occur in the presence of water, amines, alkalies and alcohols.

SECTION 11. TOXICOLOGICAL INFORMATION

HEALTH EFFECTS:

Acute:

Ingestion:	Cyanoacrylates are considered to have relatively low toxicity. This product will rapidly polymerise in the mouth.
Skin:	Irritating to skin. Bonds skin in seconds.
Eyes:	Contact with the eyes will cause irritation. This product will bond eyelids. In a dry atmosphere, vapours may irritate the eyes.
Inhalation:	Inhalation of vapours can cause respiratory irritation.
Chronic:	Prolonged exposure to high concentrations of vapours may lead to chronic effects in sensitive individuals.

Toxicity information: Oral LD_{50} (rat) : > 5000 mg/kg as for cyanoacrylates.

SECTION 12. ECOLOGICAL INFORMATION

Potential Environmental Interactions: Do not allow product to contaminate waterways or soil.

HSNO Ecotoxicity: None.

Toxicity: No data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Polymerise by adding slowly to water (10:1). Dispose of solid residues at approved land waste site. Containers should be drained and residues be allowed to cure prior to disposal at approved landfill site.

SECTION 14. TRANSPORT INFORMATION

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:

UN no.:	3334
Proper shipping name:	AVIATION REGULATED LIQUID, N.O.S. (Cyanoacrylate ester)
Class or division:	9
Packaging group:	III
Packaging instruction:	964 (passenger) 964 (cargo)
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
AS - Australian Standard
NZS - New Zealand Standard
TWA - Time-weighted average
TLV - Threshold limit value
STEL - Short-Term Exposure Limit
NOS - Not Otherwise Specified
LD_{50} - Lethal Dose - 50%. The dose of a chemical that will kill 50% of the test animals receiving it.
LC_{50} - Lethal Concentration - 50%. The concentration of a chemical in air or water that will kill 50% of the test organisms.
LCL_o – Lowest Lethal Concentration. The lowest concentration of a chemical in air or water reported to have caused the death of animals or humans.

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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