



Safety Data Sheet in compliance with Indian Manufacture, Storage and Import of Hazardous Chemicals Rules 1989, Rule 17, Schedule 9

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LOCTITE 415

MSDS-No. : 153533

V001.1

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Section 1. Identification of the substance/preparation and of the company/undertaking

Product name: LOCTITE 415

Material: 233858

Product category: Cyanoacrylate

Identification of manufacturer, importer or distributor

Manufacturer: Henkel Adhesives Technologies India Pvt. Ltd. D3/D4, MIDC, Jejuri - 412303 India. TEL : +91 2115 300017 / 18 FAX : + 91 2115 253448, Website : www.henkel.com

Emergency information: +91 2115 300017-18

Section 2. Composition / information on ingredients

General chemical description:

Cyanoacrylate Adhesive

Possible risks of product:

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

Declaration of ingredients according to (EC) No 1907/2006:

Hazardous components CAS-No.	EINECS	content	Classification
Methyl 2-cyanoacrylate 137-05-3	205-275-2	80 - 100 %	Xi - Irritant; R36/37/38

Section 3. Hazards identification

Hazard classification: Xi - Irritant

Routes of entry: Skin, Inhalation, Eyes

Health Effects:

Skin:

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

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. 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.

Eye:

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.

Ingestion:

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

Section 4. First aid measures

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).

Section 5. Fire fighting measures

Suitable extinguishing media:	Foam, extinguishing powder, carbon dioxide. Fine water spray
Special protection equipment for firefighters:	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
Hazardous combustion products:	Oxides of carbon, oxides of nitrogen, irritating organic vapors.

Section 6. Accidental release measures

Personal precautions:	Ensure adequate ventilation.
Environmental precautions:	Do not let product enter drains.
Clean-up methods:	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.

Section 7. Handling and storage

Handling:	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Avoid contact with fabric or paper goods. Contact with these materials may cause rapid polymerization which can generate smoke and strong irritating vapors, and cause thermal burns.
Storage:	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

Ingredient	Type	ppm	mg/m ³	Remarks
METHYL 2-CYANOACRYLATE 137-05-3	Time Weighted Average (TWA):	0,2		ACGIH
METHYL-2-CYANOACRYLATE 137-05-3	Recommended exposure limit (REL):	2	8	NIOSH/GUIDE
METHYL-2-CYANOACRYLATE 137-05-3	Short Term Exposure Limit (STEL):	4	16	NIOSH/GUIDE

Respiratory protection:	Ensure adequate ventilation.
Hand protection:	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. The use of chemical resistant gloves such as Nitrile are recommended.
Eye protection:	Wear protective glasses.
Engineering controls:	Use positive down-draft exhaust ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.
General protection measures:	Good industrial hygiene practices should be observed.

Section 9. Physical and chemical properties

Appearance:	colourless to yellowish liquid
Odor:	irritating
Melting point:	Not determined
Relative vapour density:	Not available
Specific gravity:	1,09
Auto ignition:	Not determined
pH:	Not available
Boiling point:	> 149 °C (> 300.2 °F)
Flash point:	80 - 93,3 °C (176 - 199.94 °F)
Vapor pressure:	0,27 mbar
Density:	1,0900 g/cm ³
Solubility:	Solvent: Water, Polymerises in presence of water. Solvent: Water, Polymerises in presence of water.

Section 10. Stability and reactivity

Conditions to avoid:	Stable under normal conditions of storage and use.
Materials to avoid:	Water, amines, alkalis and alcohols.
Hazardous polymerization:	Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.

Section 11. Toxicological information

Acute oral product toxicity:	Cyanoacrylates are considered to have relatively low toxicity. Acute oral LD50 is >5000mg/kg (rat). It is almost impossible to swallow as it rapidly polymerises in the mouth. LD50 (rat) > 5.000 mg/kg
Acute inhalation product toxicity:	Irritating to respiratory system, Prolonged exposure to high concentrations of vapours may lead to chronic effects in sensitive individuals, In dry atmosphere with < 50% humidity, vapours may irritate the eyes and respiratory system
Acute dermal product toxicity:	LD50 (rabbit) > 2.000 mg/kg (Estimated)

Skin irritation: Irritating to the skin., Bonds skin in seconds. Considered to be of low toxicity: acute dermal LD50 (rabbit)>2000mg/kg, Due to polymerisation at the skin surface allergic reaction is unlikely to occur

Eye irritation: Irritating to eyes., Liquid product will bond eyelids. In a dry atmosphere (RH<50%) vapours may cause irritation and lachrymatory effect

Section 12. Ecological information

General ecological information: Biological and Chemical Oxygen Demands (BOD and COD) are insignificant. Do not empty into drains / surface water / ground water.

Mobility: Cured adhesives are immobile.

Section 13. Disposal considerations

Product

Method of disposal: Dispose of in accordance with local and national regulations.

Packaging

Disposal for uncleaned package: Disposal must be made according to official regulations.

Section 14. Transport information

Road transport ADR:
Not dangerous goods

Railroad transport RID:
Not dangerous goods

Inland water transport ADN:
Not dangerous goods

Marine transport IMDG:
Not dangerous goods

Air transport IATA:

Class:	9
Packaging group:	
Packaging instructions (passenger)	906
Packaging instructions (cargo)	906
UN no.:	3334
Label:	9
Proper shipping name:	Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
Additional Information:	Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.

Section 15. Regulations - classification and identification

Indication of danger: Xi - Irritant

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

Safety phrases: 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.

Section 16. Other information

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Disclaimer: 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.