Safety Data Sheet

LOCTITE 408

MSDS-No. : 434634
V001.1
Date of issue: 20.05.2015

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

Product name: LOCTITE 408

Intended use: Cyanoacrylate

Supplier:
Henkel Australia Pty Ltd
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Kilsyth, Victoria, 3137
Australia

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Emergency information: 24 HOUR EMERGENCY CONTACT NUMBER 03 9724 6556

Section 2. Hazards identification

Classification of the substance or mixture
Hazardous according to the criteria of Safe Work Australia.

GHS Classification:

Hazard Class	Hazard Category	Target organ
Flammable liquids	Category 4	
Skin irritation	Category 2	
Serious eye irritation	Category 2A	
Target Organ Systemic Toxicant - Single exposure	Category 3	respiratory tract irritation
Acute hazards to the aquatic environment	Category 3	
Chronic hazards to the aquatic environment	Category 3	

Hazard pictogram:

Signal word: Warning

Hazard statement(s):	H227 Combustible liquid. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary Statement(s):	
Prevention:	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/eye protection.
Response:	P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. P332+P313 If skin irritation occurs: Get medical attention. P337+P313 If eye irritation persists: Get medical attention. P362 Take off contaminated clothing. P370+P378 In case of fire: Use water spray (fog), foam, dry chemical or carbon dioxide to extinguish.
Storage:	P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.
Disposal:	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Classification of material Xi - Irritant

Risk phrases:
R36/37/38 Irritating to eyes, respiratory system and skin.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.
S37/39 Wear suitable gloves and eye/face protection.
S46 If swallowed, seek medical advice immediately and show this container or label.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Dangerous Goods information:
Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

Signal word:
HAZARDOUS

Section 3. Composition / information on ingredients

General chemical description: Substance
General chemical description: Mixture
Type of preparation: Cyanoacrylate Adhesive

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
2-Methoxyethyl 2-cyanoacrylate	27816-23-5	60- 100 %
Bis(3-ethyl-5-methyl-4-maleimidophenyl)methane	105391-33-1	< 2.5 %
non hazardous ingredients~		< 10 %

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 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.

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.

First Aid facilities: Eye wash
Normal washroom facilities

Medical attention and special treatment: Surgery is not necessary to separate accidentally bonded tissues. Experience has shown that bonded tissues are best treated by passive, non-surgical first aid. If rapid curing has caused thermal burns they should be treated symptomatically after adhesive is removed.

Section 5. Fire fighting measures

Suitable extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Decomposition products in case of fire:: Oxides of carbon, oxides of nitrogen, irritating organic vapors.

Particular danger in case of fire:: Do not expose to direct heat.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

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

Precautions for safe 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.

Conditions for safe storage: Store in a cool, dry, well-ventilated area.
Storage at 2 to 8°C is recommended.
Refer to AS 1940: The Storage and Handling of Flammable and Combustible Liquids.

Section 8. Exposure controls / personal protection

National exposure standards:

None

Engineering controls: Ensure good ventilation/extraction.

Eye protection: Safety goggles or safety glasses with side shields.

Skin protection: Use nitrile gloves and aprons as necessary to prevent contact. Do not use PVC, nylon or cotton.

Respiratory protection: If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

Section 9. Physical and chemical properties

Appearance:	Colorless to light yellow Liquid
Odor:	Odorless
Odor threshold (CA):	1 - 2 ppm
Specific gravity:	1.1
Boiling point:	> 149 °C (> 300.2 °F)
Flash point: (Tagliabue closed cup)	80 °C (176 °F)
Vapor pressure:	< 0.2 mm hg
Density:	1.1 g/cm3
VOC content: (1999/13/EC)	< 3 %

Section 10. Stability and reactivity

Stability: Stable under recommended storage conditions.

Conditions to avoid: Avoid moisture.
Protect from direct sunlight.
Heat, flames, sparks and other sources of ignition.

Incompatible materials: Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.
Reaction with strong oxidants.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors.

Section 11. Toxicological information

Health Effects:

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

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.

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.

Aggrevated med. condition: Eye, skin, and respiratory disorders.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
2-Methoxyethyl 2-cyanoacrylate 27816-23-5	LD50	> 5,000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
	LD50	> 2,000 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Bis(3-ethyl-5-methyl-4-maleimidophenyl)methane 105391-33-1	LD50	> 5,000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
2-Methoxyethyl 2-cyanoacrylate 27816-23-5	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Bis(3-ethyl-5-methyl-4-maleimidophenyl)methane 105391-33-1	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
2-Methoxyethyl 2-cyanoacrylate 27816-23-5	not irritating	300 s		HET-CAM Test
Bis(3-ethyl-5-methyl-4-maleimidophenyl)methane 105391-33-1	not irritating	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
2-Methoxyethyl 2-cyanoacrylate 27816-23-5	not sensitising	Guinea pig maximisation test	guinea pig	
Bis(3-ethyl-5-methyl-4-maleimidophenyl)methane 105391-33-1	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
2-Methoxyethyl 2-cyanoacrylate 27816-23-5	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Bis(3-ethyl-5-methyl-4-maleimidophenyl)methane 105391-33-1	negative	bacterial gene mutation assay	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Section 12. Ecological information

General ecological information: Do not empty into drains / surface water / ground water.

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Bis(3-ethyl-5-methyl-4-maleimidophenyl)methane 105391-33-1	LC50	0.5 mg/l	Fish	48 h	Oryzias latipes	OECD Guideline 203 (Fish, Acute Toxicity Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
2-Methoxyethyl 2-cyanoacrylate 27816-23-5	readily biodegradable	aerobic	86 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

Section 13. Disposal considerations

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

Disposal for uncleaned package: Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Section 14. Transport information

Road and Rail Transport:

Dangerous Goods information:	Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

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
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

SUSMP Poisons Schedule None

Section 16. Other information

Abbreviations/acronyms:
ADGC - Australian Dangerous Goods Code
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

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Disclaimer:

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