Safety Data Sheet

LOCTITE 401

SDS No. : 624092
V001.0
Date of issue: 03.01.2024

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

Product name: LOCTITE 401

Intended use: Adhesive

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

Phone: +61 (3) 9724 6444

Emergency Telephone for Chemical Accidents: 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

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

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.
Precautionary Statement(s):	
Prevention:	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing mist/vapours. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face 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 do. Continue rinsing. P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Disposal:	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

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).

Section 3. Composition / information on ingredients

General chemical description: Mixture
Type of preparation: Cyanoacrylate Adhesive

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Ethyl 2-cyanoacrylate	7085-85-0	60- <= 100 %

Section 4. First aid measures

Ingestion: Ensure breathing passages are not obstructed. The product will polymerize rapidly and bond to the mouth making it almost impossible to swallow. Saliva will separate any solidified product in several hours. Prevent the patient from swallowing any separated mass.

Skin: Do not pull bonded skin apart. Soak in warm soapy water. Gently peel apart using a blunt instrument. If skin is burned due to the rapid generation of heat by a large drop, seek medical attention. If lips are bonded, apply warm water to the lips and encourage wetting and pressure from saliva in mouth. Peel or roll lips apart. Do not pull lips apart with direct opposing force.

Eyes:	Immediately flush with plenty of water for at least 15 minutes. Get medical attention. If eyelids are bonded closed, release eyelashes with warm water by covering with a wet pad. Do not force eye open. Cyanoacrylate will bond to eye protein and will cause a lachrymatory effect which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Medical attention should be sought in case solid particles of polymerized cyanoacrylate trapped behind the eyelid caused abrasive damage.
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.
First Aid facilities:	Eye wash and safety shower Normal washroom facilities

Section 5. Fire fighting measures

Suitable extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Decomposition products in case of fire:	Trace amounts of toxic and/or irritating fumes may be released and the use of breathing apparatus is recommended.
Particular danger in case of fire:	None
Special protective equipment for fire-fighters:	Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode.

Section 6. Accidental release measures

Environmental precautions:	Ventilate area. Do not allow product to enter sewer or waterways.
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. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

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.

Section 8. Exposure controls / personal protection

National exposure standards:

Eye protection:	Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.
Skin protection:	Use nitrile gloves and aprons as necessary to prevent contact. Do not use PVC, nylon or cotton.
Respiratory protection:	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Section 9. Physical and chemical properties

Appearance:	colourless to yellowish liquid
Odor:	Sharp
pH:	Not applicable, Product reacts with water.
Melting point / freezing point:	Not applicable, Product is a liquid
Boiling point:	> 149 °C (> 300.2 °F)
Flash point:	80 - 93 °C (176 - 199.4 °F)
Vapor pressure: (; 50 °C (122 °F))	< 700 mbar
Vapor density:	> 1
Density:	1.1 g/cm3
Viscosity (dynamic):	100.0 - 120.0 mPa.s(Brookfield; Instrument: LVF; 25 °C (77 °F); speed of rotation: 30 min-1; Spindle No: 1; Method: ;; LCT STM 10; Viscosity Brookfield)70.0 - 110.0 mPa.s(Cone and plate; Instrument: Physica MC 100 (or equivalent), Cone CP50-1; 25 °C (77 °F); Shear gradient: 3,000 s-1; Method: ;; LCT STM 740; cone & plate viscosity)

Section 10. Stability and reactivity

Conditions to avoid:	Spontaneous polymerization.
Incompatible materials:	Water, amines, alkalis and alcohols.
Hazardous decomposition products:	None

Section 11. Toxicological information

Health Effects:
Ingestion: May cause irritation of the stomach
Skin: Causes skin irritation.
Eyes: Causes serious eye irritation.
Inhalation: May cause respiratory tract irritation.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	LD50 LD50	> 5,000 mg/kg > 2,000 mg/kg	oral dermal		rat rabbit	equivalent or similar to OECD Guideline 423 (Acute Oral toxicity) equivalent or similar to OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	slightly irritating	24 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	not sensitising	Skin sensitisation	guinea pig	not specified

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test mammalian cell gene mutation assay	with and without with and without with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

Section 12. Ecological information

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

Ecotoxicity:

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Ethyl 2-cyanoacrylate 7085-85-0	not readily biodegradable.	aerobic	57 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Ethyl 2-cyanoacrylate 7085-85-0	0.776				22 °C	EU Method A.8 (Partition Coefficient)

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. 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.

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 IATA:	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
SUSMP - Standard for the Uniform Medicines of Medicines and Poisons
STEL - Short term exposure limit
TWA - Time weighted average
CAS: Chemical Abstracts Service
GHS: Globally Harmonized System
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
AIIC - Australian Inventory of Industrial Chemicals (AIIC)
AICIS - Australian Industrial Chemicals Introduction Scheme

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Disclaimer:

The percentage weight (% w/w) of ingredients is not to be taken as a specification guaranteed by Henkel Australia Pty. Limited, but only as an approximate guide to the content of hazardous ingredients in the material. The information contained herein does not constitute a guarantee by Henkel Australia Pty. Limited concerning the properties of the material.
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