



Safety Data Sheet

LOCTITE UR 1202
known as (PURWELD 1202)

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MSDS-No. : 359633
V001.3

Date of issue: 28-05-2019

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

Product name: LOCTITE UR 1202
known as (PURWELD 1202)

Intended use: 1-component-polyurethane adhesive

Supplier:
Henkel Australia Pty Ltd
135-141 Canterbury Road
Kilsyth, Victoria, 3137
Australia

Phone: +61 (3) 9724 6444

Emergency information: 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:

<u>Hazard Class</u>	<u>Hazard Category</u>	<u>Route of Exposure</u>	<u>Target organ</u>
Acute toxicity	Category 4	Inhalation	
Skin irritation	Category 2		
Serious eye irritation	Category 2A		
Respiratory sensitizer	Category 1		
Skin sensitizer	Category 1		
Carcinogenicity	Category 2		
Target Organ Systemic Toxicant - Single exposure	Category 3		respiratory tract irritation
Target Organ Systemic Toxicant - Repeated exposure	Category 2		

Hazard pictogram:



Signal word: Danger

Hazard statement(s):	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary Statement(s):	
Prevention:	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear eye protection/face protection. P280 Wear protective gloves. P281 Use personal protective equipment as required. P285 In case of inadequate ventilation wear respiratory 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. P308+P313 IF exposed or concerned: Get medical advice/attention. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362 Take off contaminated clothing.
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, and product characteristics at time of disposal.

Classification of material Xn - Harmful Xi - Irritant

Risk phrases:

R20 Harmful by inhalation.
R36/37/38 Irritating to eyes, respiratory system and skin.
R40 Limited evidence of a carcinogenic effect.
R42/43 May cause sensitization by inhalation and skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety phrases:

S23 Do not breathe vapour/spray.
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.
S27 Take off immediately all contaminated clothing.
S28 After contact with skin, wash immediately with plenty of water.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S46 If swallowed, seek medical advice immediately and show this container or label.

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: Mixture

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Isocyanic acid, polymethylenepolyphenylene ester, polymer with methyloxirane polymer with oxirane ether with 1,2,3-propanetriol (3:1	58228-05-0	10- 30 %
Polymethylenepolyphenyl polyisocyanate , polymer with ethylenediamine, methyloxirane and propane-1,2-diol	67815-87-6	10- 30 %
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	10- 30 %
4,4'- methylenediphenyl diisocyanate	101-68-8	< 20 %
Polymethylenepolyphenyl polyisocyanate	9016-87-9	< 10 %
o-(p-Isocyanatobenzyl)phenyl isocyanate	5873-54-1	< 3 %
non hazardous ingredients~		< 10 %

Section 4. First aid measures

Ingestion: Do not induce vomiting.
Have victim rinse mouth thoroughly with water.
Seek medical advice.

Skin: Immediately remove soiled or soaked clothing.
Immediately wash skin thoroughly with soap and water.
Seek medical advice.

Eyes: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical advice.

Inhalation: Move to fresh air.
Keep warm and in a quiet place.
Seek medical advice.

First Aid facilities: Eye wash and safety shower
Normal washroom facilities

Medical attention and special treatment: Treat symptomatically.

Exposed persons should be kept under medical observation for at least 48 hours because delayed effects may occur.

Section 5. Fire fighting measures

Suitable extinguishing media: Foam, dry chemical or carbon dioxide.

Improper extinguishing media: High pressure waterjet

Decomposition products in case of fire:: Thermal decomposition can lead to release of irritating gases and vapors.
carbon monoxide
Carbon dioxide.
Oxides of nitrogen.
Isocyanate vapors

Special protective equipment for fire-fighters: Wear protective equipment.
Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

Section 6. Accidental release measures

Personal precautions: Wear protective equipment.
Danger of slipping on spilled product.
Keep unprotected persons away.
Avoid contact with skin and eyes.
See advice in section 8

Environmental precautions: Do not empty into drains / surface water / ground water.

Clean-up methods: Remove with liquid-absorbing material (sand, peat, sawdust).
Dispose of contaminated material as waste according to Section 13.

Section 7. Handling and storage

Precautions for safe handling: Avoid contact with eyes, skin and clothing.
Avoid breathing vapors or mists of this product.
Wash thoroughly after handling.
Wear suitable protective clothing, safety glasses and gloves.

Conditions for safe storage: Store in sealed original container protected against moisture.
Storage at 10 to 30°C is recommended.
Ensure good ventilation/extraction.
Store in a cool, dry place.
Store at room temperature.

Section 8. Exposure controls / personal protection

National exposure standards:

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Peak Limit. (ppm)	Peak Limit. (mg/m3)	STEL (ppm)	STEL (mg/m3)
ISOCYANATES, ALL (AS NCO) 9016-87-9			0.02	-	-	-	-
ISOCYANATES, ALL (AS NCO) 9016-87-9		-	-	-	-	-	0.07
METHYLENE BISPHENYL ISOCYANATE (MDI) 9016-87-9			0.02	-	-	-	-
METHYLENE BISPHENYL ISOCYANATE (MDI) 9016-87-9		-	-	-	-	-	0.07
METHYLENE BISPHENYL ISOCYANATE (MDI) 101-68-8			0.02	-	-	-	-
METHYLENE BISPHENYL ISOCYANATE (MDI) 101-68-8		-	-	-	-	-	0.07
ISOCYANATES, ALL (AS NCO) 9016-87-9			0.02	-	-	-	-
ISOCYANATES, ALL (AS NCO) 9016-87-9		-	-	-	-	-	0.07

METHYLENE BISPHENYL ISOCYANATE (MDI) 9016-87-9			0.02	-	-	-	-
METHYLENE BISPHENYL ISOCYANATE (MDI) 9016-87-9		-	-	-	-		0.07
ISOCYANATES, ALL (AS NCO) 5873-54-1			0.02	-	-	-	-
ISOCYANATES, ALL (AS NCO) 5873-54-1		-	-	-	-		0.07

- Engineering controls:** Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.
- 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:** Wear suitable protective clothing.
Suitable protective gloves.

Nitrile rubber gloves should be worn.
- 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:** brown
liquid
- Odor:** characteristic
- Melting point / freezing point:** Not available.
- Specific gravity:** 1.1
- Flash point:** No flash point up to 200 °C
- Density:** 9.16 lb/gal
- Auto ignition:** Not available.
- Decomposition temperature:**
- VOC content (2004/42/EC)** 0 % (VOCV 814.018 VOC regulation CH)
- VOC content:** 10 g/l

Section 10. Stability and reactivity

- Stability:** Stable under normal conditions of temperature and pressure.
- Conditions to avoid:** Moisture.
Keep away from open flames, hot surfaces and sources of ignition.
Avoid heating.
- Incompatible materials:** Water, Amines, Alkalis, Alcohols.
Reaction with water, formation of CO2
Acids.
- Hazardous decomposition products:** Thermal decomposition can lead to release of irritating gases and vapors.

Carbon monoxide.
carbon dioxide
Oxides of nitrogen.
Isocyanates.

Section 11. Toxicological information

Health Effects:

Ingestion:

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Skin:

Irritating to skin.

Symptoms may include redness, edema, drying, defatting and cracking of the skin.

May cause skin sensitization.

Eyes:

Causes eye irritation.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation:

Harmful by inhalation.

May cause allergic respiratory reaction.

May cause respiratory tract irritation.

Vapors may cause headaches, nausea, dizziness and respiratory tract irritation.

Carcinogenicity:

Suspected of causing cancer.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Isocyanic acid, polymethylenepolyphenyl ene ester, polymer with methyloxirane polymer with oxirane ether with 1,2,3-propanetriol (3:1 58228-05-0	LD50	> 2,000 mg/kg	oral		rat	EU Method B.1 (Acute Toxicity (Oral))
	LD50	> 9,400 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Polymethylenepolyphenyl polyisocyanate , polymer with ethylenediamine, methyloxirane and propane-1,2-diol 67815-87-6	LD50	> 2,000 mg/kg	oral		rat	EU Method B.1 (Acute Toxicity (Oral))
	LD50	> 9,400 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Isocyanic acid, polymethylenepolyphenyl ene ester 9016-87-9	LD50	> 10,000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
	LD50	> 9,400 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 2,000 mg/kg	oral		rat	OECD Guideline 403 (Acute Inhalation Toxicity)
	LC50	> 2.24 mg/l	inhalation		rat	OECD Guideline 402 (Acute Dermal Toxicity)
	LD50	> 9,400 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Polymethylenepolyphenyl polyisocyanate 9016-87-9	LD50	> 10,000 mg/kg	oral		rat	
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	LD50	> 2,000 mg/kg	oral		rat	EU Method B.1 (Acute Toxicity (Oral))
	LD50	> 9,400 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
4,4'- methylenediphenyl diisocyanate 101-68-8	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Isocyanic acid, polymethylenepolyphenyl ene ester, polymer with methyloxirane polymer with oxirane ether with 1,2,3-propanetriol (3:1 58228-05-0	sensitising		mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	in vivo	guinea pig	

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
4,4'- methylenediphenyl diisocyanate 101-68-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Isocyanic acid, polymethylenepolyphenyl ene ester 9016-87-9	NOAEL=0,2 mg/m ³	inhalation: aerosol	2 y6 h per d, 5 d per week	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
4,4'- methylenediphenyl diisocyanate 101-68-8		inhalation: aerosol	main: 2 y; satellite:1 y6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Polymethylenepolyphenyl polyisocyanate 9016-87-9	NOAEL=0,2 mg/m ³	inhalation: aerosol	2 y6 h per d, 5 d per week	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1		inhalation: aerosol	main: 2 y; satellite: 1 y6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Section 12. Ecological information

General ecological information:

Do not empty into drains, soil or bodies of water.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Isocyanic acid, polymethylenepolyphenylene ester, polymer with methyloxirane polymer with oxirane ether with 1,2,3- propanetriol (3:1 58228-05-0	LC50	> 1,000 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Isocyanic acid, polymethylenepolyphenylene ester, polymer with methyloxirane polymer with oxirane ether with 1,2,3- propanetriol (3:1 58228-05-0	EC50	> 1,640 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Polymethylenepolyphenyl polyisocyanate , polymer with ethylenediamine, methyloxirane and propane- 1,2-diol 67815-87-6	LC50	> 1,000 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Polymethylenepolyphenyl polyisocyanate , polymer with ethylenediamine, methyloxirane and propane- 1,2-diol 67815-87-6	EC50	> 1,000 mg/l	Daphnia	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Polymethylenepolyphenyl polyisocyanate , polymer with ethylenediamine, methyloxirane and propane- 1,2-diol 67815-87-6	EC50	> 1,640 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	LC50	> 1,000 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	LC0	> 3,000 mg/l	Fish	96 h	Oryzias latipes	OECD Guideline 203 (Fish, Acute Toxicity Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	129.7 mg/l	Daphnia	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	> 1,640 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	LC50	> 1,000 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
4,4'- methylenediphenyl diisocyanate 101-68-8		aerobic	0 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
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4,4'-methylenediphenyl diisocyanate 101-68-8		92 - 200	28 d	Cyprinus carpio		OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test)
4,4'-methylenediphenyl diisocyanate 101-68-8	5.22					
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	5.22					

Section 13. Disposal considerations

Waste disposal of product: In consultation with the responsible local authority, must be subjected to special treatment. Follow all local, state, federal and provincial regulations for disposal.

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).

General information:

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

Section 15. Regulatory information

SUSMP Poisons Schedule None

AICS: All components are listed or are exempt from listing on the Australian Inventory of Chemical Substances (AICS).

Section 16. Other information

Abbreviations/acronyms: ADGC - Australian Dangerous Goods Code
IMDG: International Maritime Dangerous Goods code
STEL - Short term exposure limit
TWA - Time weighted average
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

Reason for issue: Reviewed SDS. Reissued with new date. involved chapters: 1 - 16

Date of previous issue: 16.06.2010

Disclaimer:

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