

Safety Data Sheet

LOCTITE LB 8151 AE 12FOEN

Page 1 of 12

SDS No. : 175601 V001.4 Date of issue: 30.03.2020

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

LOCTITE LB 8151 AE 12FOEN

Product name:

Intended use:

Lubricant

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:

Hazard Class	Hazard Category	<u>Target organ</u>
Flammable aerosols	Category 1	
Skin irritation	Category 2	
Serious eye damage/eye irritation	Category 1	
Target Organ Systemic Toxicant -	Category 3	Central nervous system
Single exposure		
Acute hazards to the aquatic environment	Category 2	
Chronic hazards to the aquatic environment	Category 2	
Hazard pictogram:		!
Signal word:	Danger	

Hazard statement(s):	 H222 Extremely flammable aerosol. H315 Causes skin irritation. H318 Causes serious eye damage. H336 May cause drowsiness or dizziness. H411 Toxic 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.
	P211 Do not spray on an open flame or other ignition source.
	P251 Do not pierce or burn, even after use.
	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.
D	P280 Wear protective gloves, eye protection, and 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+P315 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
	P332+P313 If skin irritation occurs: Get medical advice/attention.
	P362 Take off contaminated clothing.
	P391 Collect spillage.
Storage:	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
	P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal:	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

Dangerous Goods information:

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

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
acetone	67-64-1	10- < 20 %
Distillates (petroleum), hydrotreated heavy naphthenic <3% DMSO	64742-52-5	10- < 30 %
butane	106-97-8	< 10 %
Graphite	7782-42-5	< 10 %
Calcium oxide	1305-78-8	3-< 10 %
Distillates (petroleum), hydrotreated light naphthenic < 3% DMSO	64742-53-6	< 10 %
cyclohexane	110-82-7	<= 10 %
non hazardous ingredients~		10- <= 20 %

Section 4. First aid measures

Ingestion:	Do not induce vomiting. Have victim rinse mouth thoroughly with water. Seek medical advice.			
Skin:	Remove contaminated clothing and footwear. Wash with soap and water. If symptoms develop and persist, get medical attention. Wash clothing before reuse.			
Eyes:	Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.			
Inhalation:	Move to fresh air in case of accidental inhalation of vapours. If adverse health effects develop seek medical attention.			
First Aid facilities:	Eye wash Normal washroom facilities			
Medical attention and special treatment:	Treat symptomatically and supportively.			
Section 5. Fire fighting measures				
	Section 5. Fire fighting measures			
Suitable extinguishing media:	Section 5. Fire fighting measures Water spray or fog. Carbon dioxide. Dry chemical.			
Suitable extinguishing media: Decomposition products in case of fire:	Water spray or fog. Carbon dioxide.			
Decomposition products in case of	Water spray or fog. Carbon dioxide. Dry chemical. Thermal decomposition can lead to release of irritating gases and vapors. carbon monoxide			
Decomposition products in case of fire:	Water spray or fog. Carbon dioxide. Dry chemical. Thermal decomposition can lead to release of irritating gases and vapors. carbon monoxide Carbon dioxide. WARNING FLAMMABLE! Contents under pressure. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.			

Section 6. Accidental release measures				
Personal precautions:	Avoid contact with skin and eyes. Avoid inhalation of vapor, fumes, dust and/or mist from the spilled material.			
Environmental precautions:	Do not allow to enter in surface / ground water.			
Clean-up methods:	Remove the absorbed material, and place in an appropriate chemical waste container for disposal. Ventilate area.			

Section 7. Handling and storage

Precautions for safe handling:	Avoid breathing vapors or mists of this product. Avoid contact with eyes, skin and clothing. Keep away from heat, spark and flame. Vapors will accumulate readily and may ignite explosively. Ensure adequate ventilation.
Conditions for safe storage:	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. Do not puncture, incinerate, or expose to temperatures above 48.9 °C (120 °F).

Section 8. Exposure controls / personal protection

National exposure standards:	
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.
Skin protection:	Chemical resistant, impermeable gloves.
	Wear suitable protective clothing.
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:	silver
	Aerosol, liquid
Odor:	mild, Petroleum
Specific gravity:	0.77
Boiling point:	0 - 212 °F (-17.8 - 100 °C)
Flash point:	< -18 °C (< 0.4 °F)
	(value for propellant).
Flammability (solid, gas):	Extremely flammable aerosol.
VOC content:	42 % 323 g/l

Section 10. Stability and reactivity

Stable under normal conditions of temperature and pressure.

Stability:

Conditions to avoid:

Keep away from heat, spark and flame. Do not puncture, incinerate, or expose to temperatures above 48.9 °C (120 °F).

Incompatible materials:	Oxidizing agents. Acids. Alkalis.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapors. carbon monoxide carbon dioxide
Hazardous polymerization:	Will not occur.

Section 11. Toxicological information

Health Effects:	
Ingestion:	Not expected under normal conditions of use.
Skin:	Causes skin irritation.
	Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Eyes:	Causes serious eye damage.
	Contact can cause moderate to severe irritation and possible injury to the eyes.
Inhalation:	May cause irritation to nose and throat.
	Vapours may cause drowsiness and dizziness.
	Central nervous system depression, including dizziness, drowsiness, fatigue, nausea, headache,
	unconsciousness.

Acute toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time	-	
acetone	LD50	5,800 mg/kg	oral		rat	not specified
67-64-1	LC50	76 mg/l	inhalation	4 h	rat	not specified
	LD50	> 15,688 mg/kg	dermal		rabbit	Draize Test
Distillates (petroleum),	LD50	> 5,000 mg/kg	oral		rat	OECD Guideline 401 (Acute
hydrotreated heavy	LC50	> 5.53 mg/l	inhalation	4 h	rat	Oral Toxicity)
naphthenic <3%DMSO	LD50	> 5,000 mg/kg	dermal		rabbit	OECD Guideline 403 (Acute
64742-52-5						Inhalation Toxicity)
						OECD Guideline 402 (Acute
						Dermal Toxicity)
butane	LC50	274200 ppm		4 h	rat	not specified
106-97-8			inhalation			
Graphite	LD50	> 2,000 mg/kg	oral		rat	OECD Guideline 423 (Acute
7782-42-5	LC50	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	inhalation	4 h	rat	Oral toxicity)
						OECD Guideline 403 (Acute
						Inhalation Toxicity)
Calcium oxide	LD50	> 2,000 mg/kg	oral		rat	OECD Guideline 425 (Acute
1305-78-8	LC50	> 6.04 mg/l	inhalation	4 h	rat	Oral Toxicity: Up-and-Down
	LD50	> 2,500 mg/kg	dermal		rabbit	Procedure)
		, , ,				OECD Guideline 436 (Acute
						Inhalation Toxicity: Acute
						Toxic Class (ATC) Method)
						OECD Guideline 402 (Acute
						Dermal Toxicity)
Distillates (petroleum),	LD50	> 5,000 mg/kg	oral		rat	OECD Guideline 401 (Acute
hydrotreated light	LC50	> 5.53 mg/l	inhalation	4 h	rat	Oral Toxicity)
naphthenic < 3% DMSO	LD50	> 5,000 mg/kg	dermal		rabbit	OECD Guideline 403 (Acute
64742-53-6						Inhalation Toxicity)
						OECD Guideline 402 (Acute
						Dermal Toxicity)
cyclohexane	LD50	> 5,000 mg/kg	oral		rat	equivalent or similar to OECD
110-82-7	LC50	> 32.880 mg/l	inhalation	4 h	rat	Guideline 401 (Acute Oral
	LD50	> 2,000 mg/kg	dermal		rabbit	Toxicity)
		, , ,				equivalent or similar to OECD
						Guideline 403 (Acute
						Inhalation Toxicity)
						equivalent or similar to OECD
						Guideline 402 (Acute Dermal
						Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
acetone 67-64-1	not irritating		guinea pig	not specified
Graphite 7782-42-5	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
cyclohexane 110-82-7	not irritating	4 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
acetone 67-64-1	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Graphite 7782-42-5	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Calcium oxide 1305-78-8	Category 1 (irreversible effects on the eye)		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
cyclohexane 110-82-7	slightly 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
acetone 67-64-1	not sensitising	Guinea pig maximisat ion test	guinea pig	not specified
Graphite 7782-42-5	not sensitising	Mouse local lymphnod e assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Calcium oxide 1305-78-8	not sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
cyclohexane 110-82-7	not sensitising	Buehler test	guinea pig	equivalent or similar to OECD Guideline 406 (Skin Sensitisation)

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
acetone 67-64-1	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 without		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)
acetone 67-64-1	negative	oral: drinking water		mouse	not specified
butane 106-97-8	negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test	with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
butane 106-97-8	negative negative	inhalation: gas		Drosophila melanogaster rat	not specified OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Graphite 7782-42-5	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		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)
Calcium oxide 1305-78-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Distillates (petroleum), hydrotreated light naphthenic < 3% DMSO 64742-53-6	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
cyclohexane 110-82-7	negative negative	bacterial reverse mutation assay (e.g Ames test) mammalian cell gene mutation assay	with and without with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay) equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
cyclohexane 110-82-7	negative	inhalation: vapour		rat	equivalent or similar to OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
acetone 67-64-1	NOAEL=900 mg/kg	oral: drinking water	13 wdaily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
butane 106-97-8		inhalation: gas	28 d	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Graphite 7782-42-5	NOAEL=ca. 813 mg/kg	oral: feed	daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Calcium oxide 1305-78-8	NOAEL=1,000 mg/kg	oral: gavage	up to 48 consecutive daysdaily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
cyclohexane 110-82-7	NOAEL=500 ppm	inhalation: vapour	13-14 w6 h/d, 5 d/w	mouse	EPA OPPTS 870.3465 (90- Day Inhalation Toxicity)

Section 12. Ecological information

General ecological information:

Toxic to aquatic organisms, May cause long-term adverse effects in the aquatic environment., Do not empty into drains / surface water / ground water.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
acetone	LC50	8,120 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline
67-64-1 acetone 67-64-1	EC50	8,800 mg/l	Daphnia	48 h	Daphnia pulex	203 (Fish, Acute Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute Immobilisation
						Test)
acetone 67-64-1	NOEC	530 mg/l	Algae	8 d	Microcystis aeruginosa	DIN 38412-09
acetone 67-64-1	EC10	1,000 mg/l	Bacteria	30 min	Pseudomonas putida	DIN 38412, part 27 (Bacterial oxygen consumption test)
Distillates (petroleum), hydrotreated heavy naphthenic <3%DMSO	LC50	> 1,000 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
64742-52-5 Distillates (petroleum), hydrotreated heavy naphthenic <3%DMSO 64742-52-5	EC50	> 1,000 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation
Distillates (petroleum), hydrotreated heavy naphthenic <3%DMSO	NOELR	100 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	Test) OECD Guideline 201 (Alga, Growth Inhibition Test)
64742-52-5 butane	LC50	27.98 mg/l	Fish	96 h		not specified
106-97-8 butane	EC50	14.22 mg/l	Daphnia	48 h		not specified
106-97-8 butane	EC50	7.71 mg/l	Algae	96 h		not specified
106-97-8 Graphite 7782-42-5	LC50	> 10,000 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute
Graphite 7782-42-5	EC50	> 5,600 mg/l	Daphnia	24 h	Daphnia magna	Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute
Calcium oxide 1305-78-8	LC50	50.6 mg/l	Fish	96 h	Oncorhynchus mykiss	Immobilisation Test) OECD Guideline 203 (Fish, Acute
Calcium oxide 1305-78-8	EC50	49.1 mg/l	Daphnia	48 h	Daphnia magna	Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute Immobilisation
Calcium oxide 1305-78-8	EC50	184.57 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	Test) OECD Guideline 201 (Alga, Growth
Calcium oxide 1305-78-8	NOEC	48 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	201 (Alga, Growth
Calcium oxide 1305-78-8	EC20	229.2 mg/l	Bacteria	3 h	activated sludge of a predominantly domestic sewage	Inhibition Test) OECD Guideline 209 (Activated Sludge, Respiration
Distillates (petroleum), hydrotreated light naphthenic < 3% DMSO	LL50	> 100 mg/l	Fish	96 h	Pimephales promelas	Inhibition Test) OECD Guideline 203 (Fish, Acute Toxicity Test)
64742-53-6 Distillates (petroleum), hydrotreated light naphthenic < 3% DMSO	EC50	> 1,000 mg/l	Daphnia	48 h	Daphnia magna	not specified
64742-53-6 cyclohexane	LC50	4.53 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline

LOCTITE LB 8151 AE 12FOEN

110-82-7 cyclohexane	EC50	0.9 mg/l	Daphnia	48 h	Daphnia magna	203 (Fish, Acute Toxicity Test) OECD Guideline
110-82-7						202 (Daphnia sp. Acute
						Immobilisation
						Test)
cyclohexane	EC50	9.317 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
110-82-7					(new name: Pseudokirchneriella	201 (Alga, Growth
					subcapitata)	Inhibition Test)
cyclohexane	NOEC	0.95 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
110-82-7					(new name: Pseudokirchneriella	
					subcapitata)	Inhibition Test)
cyclohexane 110-82-7	IC50	29 mg/l	Bacteria	15 h	other:	not specified

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
acetone 67-64-1	readily biodegradable	aerobic	81 - 92 %	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)
Distillates (petroleum), hydrotreated heavy naphthenic <3%DMSO 64742-52-5	not readily biodegradable.	aerobic	6 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
cyclohexane 110-82-7	readily biodegradable	aerobic	77 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
acetone 67-64-1	-0.24					OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
cyclohexane 110-82-7		167		Pimephales promelas		QSAR (Quantitative Structure Activity Relationship)
cyclohexane 110-82-7	3.44				25 °C	QSAR (Quantitative Structure Activity Relationship)

	Section 13. Disposal considerations
Waste disposal of product:	Dispose of according to regulations. Contribution of this product to waste is very insignificant in comparison to article in which it is used
Disposal for uncleaned package:	Completely empty pressurized gas containers (including propellant gas). Disposal must be made according to official regulations.

Section 14. Transport information

Road and Rail Transport:

Dangerous Goods information:	Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and
	Rail (ADG Code).
UN no.:	1950
Proper shipping name:	AEROSOLS
Class or division:	2.1
Packing group:	
Emergency information:	Refer to the Dangerous Goods - Initial Emergency Response Guide HB 76.
Marine transport IMDG:	
UN no.:	1950
Proper shipping name:	AEROSOLS (Cyclohexane, Hydrocarbons, C7, n-alkanes, isoalkanes,
1 11 0	cyclics)
Class or division:	2.1
Packing group:	
EmS:	F-D ,S-U
Seawater pollutant:	Marine pollutant
Air transport IATA:	
UN no.:	1950
Proper shipping name:	Aerosols, flammable
Class or division:	2.1
Packing group:	
Packing instructions (passenger)	203
Packing instructions (cargo)	203

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 IATA-DGR: International Air Transport Association – Dangerous Goods Regulations STEL - Short term exposure limit TWA - Time weighted average
Reason for issue:	Reviewed SDS. Reissued with new date. involved chapters: 1,2,3

01.04.2015

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.

The information contained in the Safety Data Sheet is offered in good faith and has been developed from what is believed to be accurate and reliable sources. The information is offered without warranty, representation, inducement or licence and Henkel Australia Pty. Limited assumes no legal responsibility for reliance upon same. Henkel Australia Pty. Limited disclaims any liability for loss, injury or damage incurred in connection with the use of the material or its associated Safety Data Sheet.

This information is not to be construed as a representation that the material is suitable for any particular purpose or use except those conditions and warranties implied by either Commonwealth or State statutes. Customers are encouraged to make their own enquiries as to the material's characteristics and, where appropriate, to conduct their own tests in the specific context of the material's intended use.

No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.