Safety Data Sheet

LOCTITE AUTOMOTIVE NO.3 AVIATION GASKET SEALANT

MSDS-No. : 153785
V001.2
Date of issue: 24.04.2015

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

Product name: LOCTITE AUTOMOTIVE NO.3 AVIATION GASKET SEALANT

Intended use: Sealant

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 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 2	
Serious eye irritation	Category 2A	
Skin sensitizer	Category 1	
Target Organ Systemic Toxicant - Single exposure	Category 3	Central Nervous System

Hazard pictogram:

Signal word: Danger

Hazard statement(s):	H225 Highly flammable liquid and vapor. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary Statement(s):	
Prevention:	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ventilating/lighting/equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing vapors, mist, or 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 protective gloves, eye protection, and face protection.
Response:	P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. 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. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P363 Wash contaminated clothing before reuse. P370+P378 In case of fire: Use water spray (fog), foam, dry chemical or carbon dioxide to extinguish.
Storage:	P403+P233 Store in a well-ventilated place. Keep container tightly closed. 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 F - Highly flammable Xi - Irritant

Risk phrases:
R11 Highly flammable.
R36 Irritating to eyes.
R43 May cause sensitisation by skin contact.
R67 Vapours may cause drowsiness and dizziness.

Safety phrases:
S16 Keep away from sources of ignition - No smoking.
S23 Do not breathe vapour.
S24 Avoid contact with skin.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S51 Use only in well-ventilated areas.
S36/37 Wear suitable protective clothing and gloves.

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).

Class or division:
3

Signal word:
HAZARDOUS

Section 3. Composition / information on ingredients

General chemical description: Mixture

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Rosin	8050-09-7	10- < 30 %
Propan-2-ol	67-63-0	10- < 30 %
non hazardous ingredients~		50- < 100 %

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.
Rinse with running water and soap.
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.

Section 5. Fire fighting measures

Suitable extinguishing media: Water spray (fog), 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.

Particular danger in case of fire:: WARNING FLAMMABLE!
Vapours may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back.

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

Additional fire fighting advice: In case of fire, keep containers cool with water spray.

Hazchem code: •3YE

Section 6. Accidental release measures

Personal precautions: Remove sources of ignition.

Ensure adequate ventilation.
Avoid contact with skin and eyes.
Wear appropriate personal protective equipment.
Keep unprotected persons away.

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

Clean-up methods: Wipe up using absorbent material.
Use noncombustible absorbent material such as sand.
Store in a partly filled, closed container until disposal.

Section 7. Handling and storage

Precautions for safe handling: Keep away from heat, spark and flame.
Vapours should be extracted to avoid inhalation.
Use only in well-ventilated areas.
Avoid contact with eyes, skin and clothing.
Wear protective equipment.

Conditions for safe storage: Store in a cool, dry, well-ventilated area.
Ground and bond metal containers for liquid transfer to avoid static sparks.
Do not store near sources of heat or ignition, or reactive materials.

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)
ROSIN CORE SOLDER PYROLYSIS PRODUCTS (AS FORMALDEHYDE) 8050-09-7			0.1	-	-	-	-
ISOPROPYL ALCOHOL 67-63-0		400	983	-	-	-	-
ISOPROPYL ALCOHOL 67-63-0		-	-	-	-	500	1,230

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Eye protection: Wear protective glasses.

Skin protection: Suitable protective clothing
The use of chemical resistant gloves such as Nitrile is recommended.

In circumstances where there is a potential for prolonged or repeated skin contact, the use of disposable gloves (polyethylene, natural rubber or equivalent ester-resistant material) is recommended.

Respiratory protection: Do not inhale vapors and fumes.
Use only in well-ventilated areas.
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: Alcoholic
Specific gravity: 1.12
Boiling point: 82 °C (179.6 °F)

Flash point: (None)	15 °C (59 °F)
Evaporation rate:	7.7 (Ether = 1)
Vapor pressure: (; 20 °C (68 °F))	33 mm hg
Vapor density:	2.07 (Air = 1)
Density:	1.1 g/cm3
VOC content: (1999/13/EC)	25 %

Section 10. Stability and reactivity

Stability: Stable under normal conditions of temperature and pressure.

Conditions to avoid: Heat, flames, sparks and other sources of ignition.

Incompatible materials: Strong oxidizing agents.
Acids.

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: May cause dizziness, incoordination, headache, nausea, and vomiting.

Skin: May cause mild skin irritation.
Symptoms may include redness, edema, drying, defatting and cracking of the skin.
May cause skin sensitization.

Eyes: This product is irritating to the eyes.
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation: Vapours may cause drowsiness and dizziness.
Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Rosin 8050-09-7	LD50 LD50	2,800 mg/kg > 2,000 mg/kg	oral dermal		rat rat	OECD Guideline 402 (Acute Dermal Toxicity)
Propan-2-ol 67-63-0	LD50 LC50 LD50	5,338 mg/kg 72.6 mg/l 12,870 mg/kg	oral inhalation dermal	 4 h 	rat rat rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Rosin 8050-09-7	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Propan-2-ol 67-63-0	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Rosin 8050-09-7	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Propan-2-ol 67-63-0	moderately irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Propan-2-ol 67-63-0	not sensitising	Buehler test	guinea pig	

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Rosin 8050-09-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Propan-2-ol 67-63-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Propan-2-ol 67-63-0	NOAEL=1500	inhalation	13 weeks6 hours/day, 5 days/week	mouse	
Propan-2-ol 67-63-0	LOAEL=5000	inhalation	13 weeks6 hours/day, 5 days/week	mouse	

Section 12. Ecological information

General ecological information: Cured Loctite products are typical polymers and do not pose any immediate environmental hazards., Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered.

Ecotoxicity: Do not empty into drains / surface water / ground water.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Rosin 8050-09-7	LC50	> 1,000 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Rosin 8050-09-7	EC50	911 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Rosin 8050-09-7	EC50	> 100 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	DIN 38412-09
Propan-2-ol 67-63-0	LC50	9,640 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Propan-2-ol 67-63-0	EC50	13,299 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Propan-2-ol 67-63-0	EC50	> 1,000 mg/l	Algae	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Propan-2-ol 67-63-0	NOEC	1,000 mg/l	Algae	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Rosin 8050-09-7		aerobic	36 - 46 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Propan-2-ol 67-63-0	readily biodegradable	aerobic	70 - 84 %	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Rosin 8050-09-7	3 - 6.2					OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Propan-2-ol 67-63-0	0.05					OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

Section 13. Disposal considerations

Waste disposal of product: Dispose of according to regulations.

Disposal for uncleaned package: 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. 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.:	1866
Proper shipping name:	RESIN SOLUTION
Class or division:	3
Packing group:	II
Hazchem code:	•3YE
Emergency information:	Refer to the Dangerous Goods - Initial Emergency Response Guide HB 76.
EPG:	3A1

Marine transport IMDG:

UN no.:	1866
Proper shipping name:	RESIN SOLUTION
Class or division:	3
Packing group:	II
EmS:	F-E ,S-E
Seawater pollutant:	-

Air transport IATA:

UN no.:	1866
Proper shipping name:	Resin solution
Class or division:	3
Packing group:	II
Packing instructions (passenger)	353
Packing instructions (cargo)	364

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
STEL - Short term exposure limit
TWA - Time weighted average

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Disclaimer:

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