Safety Data Sheet

LOCTITE MR 5009 known as LOCTITE HI TCK GS S

SDS No. : 153789
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SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: LOCTITE MR 5009 known as LOCTITE HI TCK GS S

Intended use: Sealant

Supplier:
Henkel New Zealand Ltd
2 Allens Rd
Auckland, 2013
New Zealand

Phone: +64 (9) 272-6710

Emergency information: 24 HOUR EMERGENCY CONTACT NUMBER 0800 243 622

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture
Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Classified as Dangerous Goods according to NZS 5433: 2012 and the Land Transport Rule: Dangerous Goods 2005.

GHS Classification:

Hazard Class	Hazard Category	Target organ
Flammable liquids	Category 2	
Skin irritation	Category 2	
Serious eye irritation	Category 2A	
Skin sensitizer	Category 1	
Toxic to reproduction	Category 2	
Target Organ Systemic Toxicant - Single exposure	Category 3	Central Nervous System
Target Organ Systemic Toxicant - Repeated exposure	Category 2	
Aspiration hazard	Category 1	
Acute hazards to the aquatic environment	Category 3	
Chronic hazards to the aquatic environment	Category 3	

Hazard pictogram:

Signal word: Danger

Hazard statement(s):
H225 Highly flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
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.
P273 Avoid release to the environment.
P280 Wear protective gloves, eye protection, and face protection.
P281 Use personal protective equipment as required.

Response:
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
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 do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.
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.
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.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

General chemical description: Mixture
Type of preparation: Sealant

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Acetone	67-64-1	30- < 60 %
n-Hexane	110-54-3	10- < 30 %
Rosin	8050-09-7	10- < 30 %
non hazardous ingredients~		30- < 60 %

SECTION 4 FIRST AID MEASURES

Ingestion: Do not induce vomiting.
Have victim rinse mouth thoroughly with water.
Seek medical advice.
If vomiting occurs, prevent aspiration by keeping the patient's head below the knees.

Ingestion: Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

Skin: Remove contaminated clothing and footwear.
Wash with soap and water.
Seek medical advice.

Skin: Rinse with running water and soap.
Seek medical advice.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes.
Seek medical advice.

Eyes: Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

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

Inhalation: Move to fresh air. If symptoms persist, 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!
Vapors may 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 inhalation of vapor, fumes, dust and/or mist from the spilled material.
Avoid contact with skin and eyes.
Wear protective equipment.

Environmental precautions: Do not empty into drains / surface water / ground water.
Dispose of according to Federal, State and local governmental regulations.

Clean-up methods: Absorb the product with dry sand, vermiculite or other inert material. Put adsorbed material into suitable containers and remove them to a safe place, where it can be stored until disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Keep away from heat, spark and flame.
Ensure good ventilation/suction at the workplace.
Avoid contact with eyes, skin and clothing.
Wear suitable protective clothing, safety glasses and gloves.
"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode.

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.
Ground and bond metal containers for liquid transfer to avoid static sparks.
Refer to AS 1940: The Storage and Handling of Flammable and Combustible Liquids.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace exposure standards:

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Ceiling	STEL (ppm)	STEL (mg/m3)
ACETONE 67-64-1		500	1,185	-	-	-
ACETONE		-	-	-	1,000	2,375
HEXANE (N-HEXANE) 110-54-3		20	72	-	-	-

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.
Explosion-proof exhaust devices are required.

Eye protection: Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection: Protective clothing that covers arms and legs.

The use of butyl rubber gloves is recommended.

Gloves should be tested to determine suitability for prolonged contact.

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:	red liquid
Odor:	Acetone
Specific gravity:	0.872
Boiling point:	57 °C (134.6 °F) Approximately
Flash point: (Closed cup)	0 °C (32 °F)
Lower explosive limit:	2 %(V)
Upper explosive limit:	13 %(V)
Vapor pressure: (; 38 °C (100.4 °F))	400 mm hg
Vapor density:	2.0
Density:	0.872 g/cm3
Solubility in water:	Partially soluble
Viscosity (dynamic): (Brookfield; Instrument: RV; speed of rotation: 10.0 min-1; Spindle No: 1; Method: ;; LCT STM 10; Viscosity Brookfield)	23,500.00 - 30,500.00 mPa.s
VOC content: (2010/75/EC)	50 - 60 %

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. Reducing 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: Ingestion of this product may cause nausea, vomiting and diarrhea.
Aspiration may occur during swallowing or vomiting, resulting in lung damage.

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

Eyes: Causes serious eye irritation.
Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation: Vapours may cause drowsiness and dizziness.
May cause dizziness, incoordination, headache, nausea, and vomiting.
Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Toxicity for reproduction: Suspected of damaging fertility or the unborn child.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
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
n-Hexane	LD50	16,000 mg/kg	oral		rat	OECD Guideline 401 (Acute
110-54-3	LC50	> 2,000 mg/kg	inhalation	24 h	rat	Oral Toxicity)
	LD50		dermal		rabbit	OECD Guideline 403 (Acute Inhalation Toxicity)
						not specified
Rosin	LD50	2,800 mg/kg	oral		rat	not specified
8050-09-7	LD50	> 2,000 mg/kg			rat	OECD Guideline 402 (Acute
			dermal			Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acetone 67-64-1	not irritating		guinea pig	not specified
Rosin 8050-09-7	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
Acetone 67-64-1	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
n-Hexane 110-54-3	not irritating		rabbit	not specified
Rosin 8050-09-7	not irritating		rabbit	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 maximisation test	guinea pig	not specified
n-Hexane 110-54-3	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

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
n-Hexane 110-54-3	negative negative	bacterial reverse mutation assay (e.g Ames test) mammalian cell gene mutation assay	with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
n-Hexane 110-54-3	negative negative	inhalation: vapour inhalation: vapour		mouse rat	not specified not specified
Rosin 8050-09-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Repeated dose toxicity:

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)
n-Hexane 110-54-3	NOAEL=586 mg/kg	oral: gavage	90 d5 d/w	rat	not specified
n-Hexane 110-54-3	NOAEL=500 ppm	inhalation: vapour	90 d6 h/d; 5 d/w	mouse	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)

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
Acetone 67-64-1	LC50	8,120 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Acetone 67-64-1	EC50	8,800 mg/l	Daphnia	48 h	Daphnia pulex	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)
n-Hexane 110-54-3	LC50	> 1 - 10 mg/l	Fish			OECD Guideline 203 (Fish, Acute Toxicity Test)
n-Hexane 110-54-3	EC50	2.1 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
n-Hexane 110-54-3	EC50	> 1 - 10 mg/l	Algae			OECD Guideline 201 (Alga, Growth Inhibition Test)
n-Hexane 110-54-3	EC 50	> 1 - 10 mg/l	Bacteria			OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

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)
n-Hexane 110-54-3	readily biodegradable, but failing 10-day window	aerobic	> 60 %	not specified
Rosin 8050-09-7	readily biodegradable	aerobic	71 %	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
Acetone 67-64-1	-0.24					OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
n-Hexane 110-54-3	4					not specified
Rosin 8050-09-7	> 3 - 6.2					OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

SECTION 13. DISPOSAL CONSIDERATIONS

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

Recommended cleanser: Clean the packaging with water.

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.

SECTION 14. TRANSPORT INFORMATION

Land Transport:

UN no.:	1133
Proper shipping name:	ADHESIVES
Class or division:	3
Packing group:	II
Hazchem code:	•3YE

Marine transport IMDG:

UN no.:	1133
Proper shipping name:	ADHESIVES
Class or division:	3
Packing group:	II
EmS:	F-E ,S-D
Seawater pollutant:	-

Air transport IATA:

UN no.:	1133
Proper shipping name:	Adhesives
Class or division:	3
Packing group:	II
Packing instructions (passenger)	353
Packing instructions (cargo)	364

SECTION 15. REGULATORY INFORMATION

New Zealand regulatory information:

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

HSNO Approval Number: HSR002662

Approved Handler: When trigger quantities are reached or exceeded an approved handler certificate is required for this substance. Refer to the specific requirements under the HSNO approval number for this substance.

Site and Storage: Refer to the site and storage requirements for this Group Standard.
Refer to the HSNO controls for approved hazardous substances.

NZIoC: Compliant for NZIOC

SECTION 16. OTHER INFORMATION

Abbreviations/acronyms:

STEL - Short term exposure limit
TWA - Time weighted average
HSNO - Hazardous Substances and New Organisms
GHS: Globally Harmonized System
CAS: Chemical Abstracts Service
LD 50: Lethal Dose 50%
LC 50: Lethal Concentration 50%
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

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Date of previous issue: 06.05.2014

Disclaimer:

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