



Safety Data Sheet according to GB/T 16483-2008

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LOCTITE 577 MEDIUM STRENGTH THREAD SEALANT
known as 577 FLANGE SEALANT 50ML

SDS No. : 168431

V001.7

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

Product name: LOCTITE 577 MEDIUM STRENGTH THREAD SEALANT known as 577 FLANGE SEALANT 50ML

Intended use: Anaerobic Sealant

Company name:

Henkel (China) Investment Co. Ltd.
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Revision date: 25.04.2016

Emergency information: Emergency telephone: +86 532 8388 9090 (24h).

2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 (General rule for classification and hazard communication of chemicals):

Hazard Class

Skin sensitizer

Specific target organ toxicity -
single exposure

Hazard Category

Category 1

Category 3

Target organ

respiratory tract irritation

Label elements according to GB 15258-2009 (General rules for preparation of precautionary label for chemicals):

Hazard pictogram:



Signal word:

Warning

Hazard statement:	H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.
Prevention:	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. 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.
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. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.
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.

3. Composition / information on ingredients

General description: Substance
General description: Mixture
Declaration of the ingredients according to GB 13690-2009:

Hazard component CAS-No.	Content	GHS Classification
Lauryl methacrylate 142-90-5	1- < 10 %	Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Specific target organ toxicity - single exposure 3 H335
Tetradecyl methacrylate 2549-53-3	1- < 10 %	Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Specific target organ toxicity - single exposure 3 H335
Acetic acid, 2-phenylhydrazide 114-83-0	0.1- < 1 %	Acute toxicity 3; Oral H301 Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Skin sensitizer 1 H317 Carcinogenicity 2 H351 Specific target organ toxicity - single exposure 3 H335
Maleic acid 110-16-7	0.1- < 1 %	Acute toxicity 4; Oral H302 Acute toxicity 4; Dermal H312 Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Skin sensitizer 1 H317 Specific target organ toxicity - single exposure 3 H335 Acute hazards to the aquatic environment 3 H402
1,4-Naphthalenedione 130-15-4	< 0.1 %	Acute toxicity 3; Oral H301 Acute toxicity 1; Inhalation H330 Skin corrosion/irritation 2; Dermal H315 Serious eye damage/eye irritation 2A H319 Skin sensitizer 1; Dermal H317 Specific target organ toxicity - single exposure 3; Inhalation H335 Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410

Only hazardous ingredients for which a classification according to GB 13690-2009 is already available are displayed in this table. For full text of the Hazard statements see section 16 "Other information".

4. First aid measures

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

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

Inhalation: Move to fresh air. If symptoms persist, seek medical advice.

Ingestion: Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.
Seek medical advice.

5. Fire fighting measures

Hazardous combustion products: Oxides of carbon, oxides of nitrogen, irritating organic vapors.

Extinguishing media: Carbon dioxide, foam, powder

Fire-fighting method: In case of fire, keep containers cool with water spray.

Notice and measures for firing fighting: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

6. Accidental release measures

Emergency measures: Avoid skin and eye contact.
Do not let product enter drains.
Ensure adequate ventilation.

Clean-up methods: For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

7. Handling and storage

Notice for handling: Use only in well-ventilated areas.
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Notice for storage: Store in original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

8. Exposure controls / personal protection

Hazardous components	GBZ 2.1-2007	ACGIH	NIOSH	OSHA
Ethene, homopolymer	5 mg/m ³ PC-TWA	10 mg/m ³ TWA 3 mg/m ³ TWA		none

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

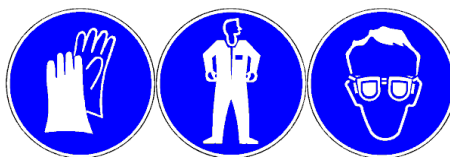
Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection: Use only in well-ventilated areas.

Eye protection: Wear protective glasses.

- Body protection:** Wear suitable protective clothing.
- Hand protection:** The use of chemical resistant gloves such as Nitrile is recommended. Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.
- Other protection:** The selection of PPE shall at least compliant with "Law of the People's Republic of China on Prevention and Control of Occupational Diseases" and "Code of practice for selection of personal protective equipments" (GB/T 11651-2008). Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while working. Good industrial hygiene practices should be observed. Good industrial hygiene practices should be observed.

Pictograms for recommended PPE:



9. Physical and chemical properties

Physical state:	Paste	Appearance:	yellow paste
pH:	3 - 6	Melting point:	Not available.
Boiling point:	> 149 °C (> 300.2 °F)	Density:	1.15 - 1.20 g/cm ³
Flash point:	> 100 °C (> 212 °F)	Ignition temperature:	Not available.
Solubility in water	Slightly soluble	Viscosity:	16,000 - 33,000 mPa.s

10. Stability and reactivity

Stability:	Stable
Conditions to avoid:	Stable under normal conditions of storage and use.
Incompatible products:	Reaction with strong acids. Reacts with strong oxidants.
Decomposition products:	Irritating organic vapours. Sulphur oxides nitrogen oxides carbon oxides.
Hazardous polymerization:	Will not occur.

11. Toxicological information

Oral toxicity:
Acute toxicity estimate (ATE) : > 5,000 mg/kg
Method: Calculation method

Inhalative toxicity:

Acute toxicity estimate (ATE) : > 40 mg/l
Exposure time: 4 h
Test atmosphere: Vapor.
Method: Calculation method

Other remarks:

Not available.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Maleic acid 110-16-7	LD50 LD50	708 mg/kg 1,560 mg/kg	oral		rat rabbit	
1,4-Naphthalenedione 130-15-4	LD50	190 mg/kg	dermal oral		rat	

12. Ecological information

General ecological information:

Harmful to aquatic organisms.
May cause long-term adverse effects in the aquatic environment.
Cured Loctite products are typical polymers and do not pose any immediate environmental hazards.

Ecotoxicity:

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

Other adverse effects:

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
Maleic acid 110-16-7	LC50	> 245 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Maleic acid 110-16-7	EC50	42.81 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1,4-Naphthalenedione 130-15-4	EC50	0.011 mg/l	Algae	72 h	Dunaliella bioculata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method

Maleic acid 110-16-7	readily biodegradable	aerobic	97.08 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
1,4-Naphthalenedione 130-15-4		no data	0 - 60 %	OECD 301 A - F

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Acetic acid, 2-phenylhydrazide 114-83-0	0.74					
Maleic acid 110-16-7	-1.3				20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
1,4-Naphthalenedione 130-15-4	1.71					

13. Disposal considerations

Product disposal:

If the waste is classified as hazardous waste according to GB 5085.7-2007 (Identification standards for hazardous wastes, General Specifications). Dispose of as hazardous waste in compliance with "Regulation on the Safety Management of Hazardous Chemicals", "Law of the People's Republic of China on the prevention and control of Environmental Pollution by Solid Waste", "National Catalogue of Hazardous Waste".

Disposal of uncleaned packages:

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.

14. Transport information

General information:

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

Notice For Transportation:

Transport according to local and national regulations. Ensure containers will not leak, collapse, or being damaged when transported. DO NOT transport with incompatible materials. Transportation vehicle should be equipped with right fire-fighting equipment in case of emergency. Avoid solarization, drenched and high temperature when transported.

15. Regulatory information

The following laws and regulations lay down provisions in terms of chemicals safety use, storage, transportation, loading/unloading, classification as well as symbol.

“Law of the People's Republic of China on Work Safety” (Adopted by the 28th meeting of 9th NPC standing committee on 29th June 2002, revised by 10th meeting of 12nd NPC standing committee on 31st Aug 2014).

“Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases” (Adopted by the 24th meeting of 9th NPC standing committee on 27th October 2001, revised by 24th meeting of 11st NPC standing committee on 31st Dec 2011).

“Law of the People's Republic of China on environmental protection” (Adopted by 11st meeting of 7th NPC standing committee on 26th December 1989, revised by 8th meeting of 12nd NPC standing committee on 24th Apr 2014).

“Regulation on the Safety Management of Hazardous Chemicals” (Adopted by 144th State Council executive meeting on 16th February 2011).

“Regulations on License to Work Safety” (Adopted by 54th State Council executive meeting on 29th July 2014).

China Inventory of Existing Chemicals:

All components are listed or are exempt from Inventory of Existing Chemical Substances in China.

16. Other information

Issue date:

19.02.2019

Issue department:

Dayong Tian, Product Safety & Regulatory Affairs Specialist for Greater China

Disclaimer:

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Others:

The full text of all abbreviations indicated by codes in this safety data sheet section 3 are as follows:

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

H402 Harmful to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

