



## Safety Data Sheet

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LOCTITE 248 LOCTITE 248 known as LOCTITE 248 19G EN/DE  
known as LOCTITE 248 19G EN/DE

SDS No. : 453681

V001.3

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

**Product name:** LOCTITE 248 LOCTITE 248 known as LOCTITE 248 19G EN/DE known as LOCTITE 248 19G EN/DE

**Other means of identification:** LOCTITE 248 19G EGFD

**Product code:** IDH1714937

**Recommended use of the chemical and restrictions on use**

**Intended use:** Adhesive

**Identification of manufacturer, importer or distributor**

**Importer:** Henkel Adhesive Technologies Vietnam Co., Ltd, No. 7, Road 9A Bien Hoa II Industrial Zone, Bien Hoa City, Dong Nai Province, Vietnam Phone: +84 61 3835 461 Fax: +84 61 3835 463

**E-mail address of person responsible for Safety Data Sheet:** ap-ua-psra.sea@henkel.com

**Emergency information:** FOR EMERGENCIES ONLY (Spill, major leak, Fire, Exposure, or Accident). Call CHEMTREC: +1 703-741-5970

### Section 2. Hazards identification

**GHS Classification:**

**Hazard Class**

Skin sensitizer

Chronic hazards to the aquatic environment

**Hazard Category**

Category 1

Category 3

**GHS label elements:**

**Hazard pictogram:**



**Signal word:**

Warning

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**Hazard statement:**

H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.

**Precaution:**

**Prevention:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves.

**Response:**

P302+P352 IF ON SKIN: Wash with plenty of water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P363 Wash contaminated clothing before reuse.

**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.

<b>Section 3. Composition / information on ingredients</b>
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**Substance or Mixture:**  
Mixture

**Declaration of hazardous chemical:**

Hazard component CAS-No.	Content	GHS Classification
Tetramethylene dimethacrylate 2082-81-7	10- 30 %	Skin Sensitization 1B H317 Acute hazards to the aquatic environment 2 H401
2-[[2,2-bis[(1-oxoallyl)oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	1- 10 %	Serious eye damage/eye irritation 2A H319 Acute hazards to the aquatic environment 2 H401 Chronic hazards to the aquatic environment 2 H411
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1- amide) 123-26-2	1- 10 %	Skin Sensitization 1B H317 Chronic hazards to the aquatic environment 4 H413
Ethene, homopolymer 9002-88-4	1- 10 %	Acute toxicity 5; Ingestion H303
Cumene hydroperoxide 80-15-9	0.1- 1 %	Flammable liquids 4 H227 Organic peroxides E H242 Acute toxicity 4; Ingestion H302 Acute toxicity 3; Inhalation - dust and mist H331 Acute toxicity 4; Dermal H312 Skin corrosion/irritation 1B H314 Specific target organ toxicity - repeated exposure 2 H373 Acute hazards to the aquatic environment 2 H401 Chronic hazards to the aquatic environment 2 H411
N,N-Diethyl-p-toluidine 613-48-9	0.1- 1 %	Acute toxicity 3; Ingestion H301 Acute toxicity 3; Inhalation - dust and mist H331 Acute toxicity 3; Dermal H311 Specific target organ toxicity - repeated exposure 2 H373 Acute hazards to the aquatic environment 3 H402 Chronic hazards to the aquatic environment 3 H412
Acetic acid, 2-phenylhydrazide 114-83-0	0.1- 1 %	Acute toxicity 3; Ingestion H301 Skin corrosion/irritation 2 H315 Serious eye damage/eye irritation 2A H319 Skin Sensitization 1 H317 Carcinogenicity 2 H351 Target Organ Systemic Toxicant - Single exposure 3 H335
N,N-dimethyl-o-toluidine 609-72-3	0.1- 1 %	Acute toxicity 3; Ingestion H301 Acute toxicity 3; Inhalation - dust and mist H331 Acute toxicity 3; Dermal H311 Specific target organ toxicity - repeated exposure 2

		H373 Acute hazards to the aquatic environment 3 H402 Chronic hazards to the aquatic environment 3 H412
1,4-Naphthalenedione 130-15-4	< 0.1 %	Acute toxicity 3; Ingestion H301 Acute toxicity 1; Inhalation - dust and mist H330 Skin corrosion/irritation 2; Dermal H315 Serious eye damage/eye irritation 2A H319 Skin Sensitization 1; Dermal H317 Target Organ Systemic Toxicant - Single exposure 3; Inhalation - dust and mist H335 Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410

#### Section 4. First aid measures

<b>Inhalation:</b>	Move to fresh air. If symptoms persist, seek medical advice.
<b>Skin contact:</b>	Rinse with running water and soap. Obtain medical attention if irritation persists.
<b>Eye contact:</b>	Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.
<b>Ingestion:</b>	Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.
<b>Indication of immediate medical attention and special treatment needed:</b>	See section: Description of first aid measures

#### Section 5. Fire fighting measures

<b>Suitable extinguishing media:</b>	Carbon dioxide, foam, powder
<b>Specific hazards arising from the chemical:</b>	In the event of a fire, carbon monoxide (CO), carbon dioxide (CO <sub>2</sub> ) and nitrogen oxides (NO <sub>x</sub> ) can be released.
<b>Special protection equipment and precautions for firefighters:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
<b>Additional fire fighting advice:</b>	In case of fire, keep containers cool with water spray.

#### Section 6. Accidental release measures

<b>Personal precautions:</b>	Avoid skin and eye contact.
<b>Environmental precautions:</b>	Waste disposal with the approval of the responsible local authority. Do not let product enter drains.

**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.

### Section 7. Handling and storage

**Handling:** Use only in well-ventilated areas.  
Avoid skin and eye contact.  
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

**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.

### Section 8. Exposure controls / personal protection

Components with specific control parameters for workplace:

CUMENE 98-82-8	<b>Value type</b>	Time Weighted Average (TWA):
	<b>ppm</b>	50
	<b>Remarks</b>	ACGIH
CUMENE 98-82-8	<b>Value type</b>	Time weighted average (TWA):
	<b>mg/m<sup>3</sup></b>	80
	<b>Remarks</b>	VN OEL
CUMENE 98-82-8	<b>Value type</b>	Short-term exposure limit (STEL):
	<b>mg/m<sup>3</sup></b>	100
	<b>Remarks</b>	VN OEL

**Respiratory protection:** Use only in well-ventilated areas.  
An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area  
Filter type: A (EN 14387)

**Hand protection:** Chemical-resistant protective gloves (EN 374).  
Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):  
nitrile rubber (NBR; >= 0.4 mm thickness)  
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):  
nitrile rubber (NBR; >= 0.4 mm thickness)  
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

**Eye protection:** Wear protective glasses.  
Protective eye equipment should conform to EN166.

**Body protection:** Wear suitable protective clothing.  
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

<b>Engineering controls:</b>	Ensure good ventilation/extraction.
<b>Hygienic measures:</b>	Good industrial hygiene practices should be observed. Do not eat, drink or smoke while working. Wash hands before work breaks and after finishing work.

### Section 9. Physical and chemical properties

<b>Appearance:</b>	blue solid
<b>Odor:</b>	characteristic
<b>Odor threshold (CA):</b>	No data available.
<b>pH:</b>	Not applicable
<b>Melting point / freezing point:</b>	No data available.
<b>Specific gravity:</b>	No data available.
<b>Boiling point:</b>	No data available.
<b>Flash point:</b>	Product is a solid.
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Lower explosive limit:</b>	No data available.
<b>Upper explosive limit:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Density:</b>	1.1 g/cm <sup>3</sup>
<b>Solubility:</b>	No data available.
<b>Partition coefficient: n-octanol/water:</b>	No data available.
<b>Auto ignition:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>VOC content:</b> (2010/75/EC)	< 3 %

### Section 10. Stability and reactivity

<b>Reactivity/Incompatible materials:</b>	Strong oxidizing agents. Free radical initiators.
<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Conditions to avoid:</b>	No decomposition if used according to specifications.
<b>Hazardous decomposition products:</b>	Oxides of carbon.

### Section 11. Toxicological information

<b>Oral toxicity:</b>	Acute toxicity estimate (ATE) : > 2,000 mg/kg Method: Calculation method
<b>Inhalative toxicity:</b>	Acute toxicity estimate (ATE) : > 5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method

**Dermal toxicity:** Acute toxicity estimate (ATE) : > 2,000 mg/kg  
Method: Calculation method

Symptoms of Overexposure: Prolonged or repeated contact may cause skin irritation.  
Prolonged or repeated contact may cause eye irritation.

**Acute oral toxicity:**

Tetramethylene dimethacrylate 2082-81-7	Value type	LD50
	Value	10,120 mg/kg
	Species	rat
	Method	
2-[[2,2-bis[(1-oxoallyl)oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	Value type	LD50
	Value	> 5,000 mg/kg
	Species	rat
	Method	OECD Guideline 401 (Acute Oral Toxicity)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	Value type	LD50
	Value	> 2,000 mg/kg
	Species	
	Method	
Ethene, homopolymer 9002-88-4	Value type	LD50
	Value	> 4,500 mg/kg
	Species	rat
	Method	
Cumene hydroperoxide 80-15-9	Value type	LD50
	Value	550 mg/kg
	Species	rat
	Method	
1,4-Naphthalenedione 130-15-4	Value type	LD50
	Value	190 mg/kg
	Species	rat
	Method	

**Acute dermal toxicity:**

Cumene hydroperoxide 80-15-9	Value type	LD50
	Value	1,200 - 1,520 mg/kg
	Species	
	Method	

**Skin corrosion/irritation:**

Cumene hydroperoxide 80-15-9	Result	corrosive
	Exposure time	
	Species	rabbit
	Method	Draize Test

**Serious eye damage/irritation:**

2-[[2,2-bis[(1-oxoallyl)oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	Result	Category II
	Exposure time	
	Species	rabbit
	Method	EU Method B.5 (Acute Toxicity: Eye Irritation / Corrosion)

**Respiratory or skin sensitization:**

Tetramethylene dimethacrylate 2082-81-7	Result	sensitising
	Test type	Mouse local lymphnode assay (LLNA)
	Species	mouse
	Method	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

**Germ cell mutagenicity:**

Tetramethylene dimethacrylate 2082-81-7	Result	negative
	Type of study / Route of administration	in vitro mammalian chromosome aberration test
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Tetramethylene dimethacrylate 2082-81-7	Result	negative
	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Tetramethylene dimethacrylate 2082-81-7	Result	positive
	Type of study / Route of administration	in vitro mammalian chromosome aberration test
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Ethene, homopolymer 9002-88-4	Result	negative
	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	
	Method	
Cumene hydroperoxide 80-15-9	Result	positive
	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	Result	negative
	Type of study / Route of administration	dermal
	Metabolic activation / Exposure time	
	Species	mouse
	Method	

**Repeated dose toxicity:**

Cumene hydroperoxide 80-15-9	Result	
	Route of application	inhalation: aerosol
	Exposure time / Frequency of treatment	6 h/d5 d/w
	Species	rat
	Method	

**Section 12. Ecological information**

**Ecotoxicity:**

Do not empty into drains / surface water / ground water., Harmful to aquatic life with long lasting effects.

**Toxicity:**

Tetramethylene dimethacrylate 2082-81-7	Value type	LC50
	Value	32.5 mg/l
	Acute Toxicity Study	Fish
	Exposure time	48 h
	Species	
	Method	DIN 38412-15
Tetramethylene dimethacrylate 2082-81-7	Value type	EC50
	Value	9.79 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	2.11 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Desmodesmus subspicatus
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Tetramethylene dimethacrylate 2082-81-7	Value type	NOEC
	Value	20 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	28 d



	Species	activated sludge, domestic
	Method	not specified
2-[[2,2-bis[[1-oxoallyl]oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	Value type	LC50
	Value	1.2 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Cyprinus carpio
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-[[2,2-bis[[1-oxoallyl]oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	Value type	EC50
	Value	> 10 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2-[[2,2-bis[[1-oxoallyl]oxy)methyl]butoxy)methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	Value type	EC50
	Value	> 12 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchnerella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	< 0.35 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchnerella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	Value type	LL50
	Value	> 10 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Oncorhynchus mykiss
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	Value type	EL50
	Value	> 10 mg/l
	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	Value type	EC50
	Value	> 100 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchnerella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
	Value type	NOEC
	Value	100 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchnerella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethene, homopolymer 9002-88-4	Value type	LC50
	Value	> 100 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Leuciscus idus
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Ethene, homopolymer 9002-88-4	Value type	EC0
	Value	> 1,000 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	
	Species	
	Method	
Cumene hydroperoxide 80-15-9	Value type	LC50
	Value	3.9 mg/l
	Acute Toxicity Study	Fish
	Exposure time	96 h
	Species	Oncorhynchus mykiss
	Method	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	Value type	EC50
	Value	18 mg/l

	Acute Toxicity Study	Daphnia
	Exposure time	48 h
	Species	Daphnia magna
	Method	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene hydroperoxide 80-15-9	Value type	ErC50
	Value	3.1 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Pseudokirchnerella subcapitata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	Value type	EC10
	Value	70 mg/l
	Acute Toxicity Study	Bacteria
	Exposure time	30 min
	Species	
	Method	
1,4-Naphthalenedione 130-15-4	Value type	EC50
	Value	0.011 mg/l
	Acute Toxicity Study	Algae
	Exposure time	72 h
	Species	Dunaliella bioculata
	Method	OECD Guideline 201 (Alga, Growth Inhibition Test)

**Persistence and degradability:**

Tetramethylene dimethacrylate 2082-81-7	Result	readily biodegradable
	Route of application	aerobic
	Degradability	84 %
	Method	OECD Guideline 310 (Ready Biodegradability CO <sub>2</sub> in Sealed Vessels (Headspace Test))
2-[[2,2-bis[[1-oxoallyl]oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	Result	
	Route of application	aerobic
	Degradability	4 - 14 %
	Method	OECD Guideline 301 B (Ready Biodegradability: CO <sub>2</sub> Evolution Test)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	Result	Not readily biodegradable.
	Route of application	aerobic
	Degradability	22 %
	Method	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Ethene, homopolymer 9002-88-4	Result	
	Route of application	aerobic
	Degradability	1 %
	Method	ISO 10708 (BODIS-Test)
Cumene hydroperoxide 80-15-9	Result	
	Route of application	no data
	Degradability	0 %
	Method	OECD Guideline 301 B (Ready Biodegradability: CO <sub>2</sub> Evolution Test)

1,4-Naphthalenedione 130-15-4	Result	
	Route of application	no data
	Degradability	0 - 60 %
	Method	OECD 301 A - F

**Bioaccumulative potential / Mobility in soil:**

Tetramethylene dimethacrylate 2082-81-7	LogKow	3.1
	Temperature	
	Method	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
2-[[2,2-bis[[[1-oxoallyl]oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate 94108-97-1	LogKow	4.14
	Temperature	30 °C
	Method	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
N,N'-Ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) 123-26-2	LogKow	5.86
	Temperature	
	Method	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Cumene hydroperoxide 80-15-9	Bioconcentration factor (BCF)	9.1
	Exposure time	
	Species	calculation
	Temperature	
	Method	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Cumene hydroperoxide 80-15-9	LogKow	2.16
	Temperature	
	Method	
Acetic acid, 2-phenylhydrazide 114-83-0	LogKow	0.74
	Temperature	
	Method	
1,4-Naphthalenedione 130-15-4	LogKow	1.71
	Temperature	
	Method	

**Section 13. Disposal considerations****Product**

**Method of disposal:** Dispose of in accordance with local and national regulations.  
Contribution of this product to waste is very insignificant in comparison to article in which it is used

**Packaging**

**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.  
Disposal must be made according to official regulations.

**Section 14. Transport information****General information:**

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

### Section 15. Regulatory information

**Regulatory Information:** Circular No 04/2012/TT-BCT, dtd 13Feb2012 (Regulations On The Classification And Labeling Of Chemicals)

**Global inventory status:**

Regulatory list	Notification
TSCA	yes
AICS	yes
DSL	yes
ENCS (JP)	yes
KECI (KR)	yes
PICCS (PH)	yes
IECSC	yes

### Section 16. Other information

**Disclaimer:** This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.