

**DOW CORNING CORPORATION  
Material Safety Data Sheet****DOW CORNING(R) 1199 SILICONE GLAZING SEALANT, CLEAR****1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY**

MSDS No.: 03079279

**SUPPLIER:**Dow Corning Canada Inc.  
15-6400 Millcreek Drive, Suite 416  
Mississauga, ON, Canada L5N 3E7

Prepared by Product Safety: (800) 248-2481

NEWALTA: (800) 567-7455

Revision Date: 2007/10/26

**MANUFACTURER:**Dow Corning Corporation  
South Saginaw Road  
Midland, Michigan 48686

24 Hour Emergency Telephone: (989) 496-5900

**WHMIS CLASSIFICATION:** Class D, Division 1, Subdivision B.  
Class D, Division 2, Subdivision A.  
Class D, Division 2, Subdivision B.**Material Usage:** Sealant and adhesive**2. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW****Generic Description:** Silicone elastomer**Physical Form:** Paste**Colour:** Colorless to pale yellow**Odour:** Very little

Ethyl methyl ketoxime is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within the following exposure guidelines: Vendor guide TWA: 3 ppm, STEL: 10 ppm; AIHA WEEL TWA: 10 ppm.

Methyl alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.

n-Butyl alcohol is formed on contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL (final rule): TWA 100 ppm and ACGIH TLV: 20 ppm.

+++++

**POTENTIAL HEALTH EFFECTS**Acute Effects

Eye: Direct contact may cause mild irritation.

Skin: May cause moderate irritation.

## DOW CORNING(R) 1199 SILICONE GLAZING SEALANT, CLEAR

Inhalation: Irritates respiratory passages very slightly. Vapor overexposure may cause drowsiness.

Oral: Overexposure by ingestion may cause drowsiness, dizziness, confusion or loss of coordination.

Prolonged/Repeated Exposure Effects

Skin: Repeated skin contact may cause allergic skin reaction.

Inhalation: Overexposure by inhalation may injure the following organ(s): Blood. Liver.

Oral: Repeated ingestion or swallowing large amounts may injure internally.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
7631-86-9	7.0 - 13.0	Silica, amorphous
22984-54-9	3.0 - 7.0	Methyl tri(ethylmethylketoxime) silane
1760-24-3	1.0 - 5.0	Aminoethylaminopropyltrimethoxysilane
556-67-2	0.1 - 1.0	Octamethylcyclotetrasiloxane
77-58-7	0.1 - 1.0	Dibutyltin dilaurate

The ingredients listed above are controlled products as defined in CPR, am. SOR/88-555.

**4. FIRST AID MEASURES**

Eye: Immediately flush with water for 15 minutes.

Skin: Remove from skin and immediately flush with water for 15 minutes. Get medical attention if irritation or ill effects develop or persist.

Inhalation: Remove to fresh air. Get medical attention if ill effects persist.

**DOW CORNING(R) 1199 SILICONE GLAZING SEALANT, CLEAR**

Oral: Get medical attention.

Notes to Physician: Treat according to person's condition and specifics of exposure.

**5. FIRE FIGHTING MEASURES**

Flash Point: Not applicable.

Autoignition Temperature: Not available.

Flammability Limits in Air: Not available.

Extinguishing Media: On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO<sub>2</sub>), dry chemical or water spray. Water can be used to cool fire exposed containers.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Unusual Fire Hazards: None.

**6. ACCIDENTAL RELEASE MEASURES**

Containment/Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, provincial, federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases.

Note: See section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, if additional information is required.

**7. HANDLING AND STORAGE**

Use with adequate ventilation. Product evolves methyl ethyl ketoxime (MEKO) when exposed to water or humid air. Provide ventilation during use to control methyl ethyl ketoxime (MEKO) within exposure guidelines or use respiratory protection. Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within Section 8 guidelines or use air-supplied or self-contained breathing apparatus. Product evolves n-butyl alcohol when exposed to water or humid air. Provide ventilation during use to control n-butyl alcohol within exposure guidelines or use respiratory protection. Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally.

Keep container closed and store away from water or moisture.

## DOW CORNING(R) 1199 SILICONE GLAZING SEALANT, CLEAR

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Component Exposure Limits**

Consult local authorities for acceptable provincial values.

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
7631-86-9	Silica, amorphous	OSHA PEL (final rule): TWA 80mg/m <sup>3</sup> /%SiO <sub>2</sub> . NIOSH REL: TWA 6mg/m <sup>3</sup> .
22984-54-9	Methyl tri(ethylmethylketoxime) silane	See ethyl methyl ketoxime comments. LC50: > 50 mg/L - Inhalation Rat ; 4 Hrs LD50: > 1,000 mg/kg - Oral Rat
1760-24-3	Aminoethylaminopropyltrimethoxysilane	See methyl alcohol comments. LC50: 1.5 mg/L - Inhalation Rat ; 4hr Aerosol Whole Body LD50: 2,295 mg/kg - Oral Rat LD50:
556-67-2	Octamethylcyclotetrasiloxane	Dow Corning guide: TWA 10 ppm. LC50: 36 mg/L - Inhalation Rat ; 4 Hrs ; 4hr Vapor/Aerosol LD50: > 2,000 mg/kg - Oral Rat
77-58-7	Dibutyltin dilaurate	Observe organic tin compounds limits. OSHA PEL and ACGIH TLV-skin: TWA 0.1 mg/m <sup>3</sup> ; ACGIH STEL 0.2 mg/m <sup>3</sup> . See n-butyl alcohol comments. LD50: 175 mg/kg - Oral Rat

Ethyl methyl ketoxime is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within the following exposure guidelines: Vendor guide TWA: 3 ppm, STEL: 10 ppm; AIHA WEEL TWA: 10 ppm.

Methyl alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.

n-Butyl alcohol is formed on contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL (final rule): TWA 100 ppm and ACGIH TLV: 20 ppm.

**Engineering Controls**

Local Ventilation: Recommended.  
General Ventilation: Recommended.

**Personal Protective Equipment for Routine Handling**

Eyes: Use proper protection - safety glasses as a minimum.

### DOW CORNING(R) 1199 SILICONE GLAZING SEALANT, CLEAR

Skin:	Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.
Suitable Gloves:	Avoid skin contact by implementing good industrial hygiene practices and procedures. Select and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials.
Inhalation:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.
Suitable Respirator:	General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits as determined by air sampling or are unknown, appropriate respiratory protection should be worn. Follow CSA Standard Z94.4-93 and use NIOSH/MHSA approved respirators.

#### **Personal Protective Equipment for Spills**

Eyes:	Use full face respirator.
Skin:	Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.
Inhalation/Suitable Respirator:	Respiratory protection recommended. Follow CSA Standard Z94.4-93 and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Precautionary Measures:	Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally. Use reasonable care.
Comments:	Product evolves methyl ethyl ketoxime (MEKO) when exposed to water or humid air. Provide ventilation during use to control methyl ethyl ketoxime (MEKO) within exposure guidelines or use respiratory protection. Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within Section 8 guidelines or use air-supplied or self-contained breathing apparatus. Product evolves n-butyl alcohol when exposed to water or humid air. Provide ventilation during use to control n-butyl alcohol within exposure guidelines or use respiratory protection.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

#### **9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical Form: Paste

**DOW CORNING(R) 1199 SILICONE GLAZING SEALANT, CLEAR**

Color: Colorless to pale yellow  
 Odor: Very little  
 Odor Threshold: Not available.  
 Specific Gravity @ 25°C: 1.04  
 Viscosity: Not available.  
 Freezing/Melting Point: Not available.  
 Boiling Point: Not available.  
 Vapor Pressure @ 25°C: Not available.  
 Vapor Density: Not available.  
 Evaporation Rate: Not available.  
 Solubility in Water: Not available.  
 Coefficient of Water/Oil: Not available.  
 Distribution:  
 pH: Not available.  
 Volatile Content: Not available.  
  
 Flash Point: Not applicable.  
 Autoignition Temperature: Not available.  
 Flammability Limits in Air: Not available.

Note: The above information is not intended for use in preparing product specifications. Contact Dow Corning before writing specifications.

**10. STABILITY AND REACTIVITY**

Chemical Stability: Stable.  
 Hazardous Polymerization: Hazardous polymerization will not occur.  
 Conditions to Avoid: None.  
 Materials to Avoid: Water, moisture, or humid air can cause hazardous vapours to form as described in Section 8 . Oxidizing material can cause a reaction.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde. Nitrogen oxides. Metal oxides.

**11. TOXICOLOGICAL INFORMATION****Component Toxicology Information**

Recent results from a 2 year repeated vapour inhalation exposure study to rats of octamethylcyclotetrasiloxane (D4) indicate effects (benign uterine adenomas) in the uterus of female animals. These effects, which have been shown to be rat-specific, occur at the highest exposure dose (700 ppm) only, a level that greatly exceeds typical workplace or consumer exposures. Industrial, commercial, or consumer uses of products containing D4 do not represent a risk to

## DOW CORNING(R) 1199 SILICONE GLAZING SEALANT, CLEAR

humans.

Octamethylcyclotetrasiloxane administered to rats by inhalation at concentrations of 500 and 700 ppm resulted in statistically significant decreases in the number of pups born and the live litter size in both the first and second generations. Prolonged estrous cycles, and decreased mating and fertility indices were observed following 700 ppm exposure in the second generation only. There were also increases in the incidence of deliveries of offspring extending over an unusually long time period (dystocia). Subsequent mode of action work demonstrated the effect on reproduction in female rats is due to delayed ovulation caused by a treatment-related delay in or blockage of the luteinizing hormone (LH) surge on the day of proestrus. This mode of action is not considered relevant to humans.

Methyl Ethyl Ketoxime (MEKO) is formed upon contact with water or humid air. Male rodents exposed to MEKO vapor throughout their lifetime developed liver cancer. Additional testing is planned by the MEKO supplier to determine any relevance to humans. Until more data is known, exposure levels should be maintained as low as achievable.

**Special Hazard Information on Components****Teratogens**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>	
77-58-7	0.1 - 1.0	Dibutyltin dilaurate	Evidence of teratogenicity (birth defects) in laboratory animals.

**Reproductive Effects**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>	
556-67-2	0.1 - 1.0	Octamethylcyclotetrasiloxane	Evidence of reproductive effects in laboratory animals.
77-58-7	0.1 - 1.0	Dibutyltin dilaurate	Evidence of reproductive effects in laboratory animals.

**Sensitizers**

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>	
22984-54-9	3.0 - 7.0	Methyl tri(ethylmethylketoxime) silane	Possible skin sensitizer.
1760-24-3	1.0 - 5.0	Aminoethylaminopropyltrimethoxysilane	Possible skin sensitizer.

**12. ECOLOGICAL INFORMATION****Environmental Fate and Distribution**

**DOW CORNING(R) 1199 SILICONE GLAZING SEALANT, CLEAR**

**Air:** This product is a solid consisting of a high molecular weight silicone polymer and other solid materials. Unless milled to produce a dust or particles, it is unlikely to give rise to atmospheric contamination.

**Water:** This product is a solid which is completely insoluble in water. As the specific gravity is >1, it will sink to the bottom of the water course.

**Soil:** This product will enter the terrestrial environment if, as a component of municipal or industrial solid waste the product is landfilled. It is unlikely that further significant transformation of the product will occur.

**Degradation:** High molecular weight polymer which is amenable to recycling. The product is not biodegradable. The product is removed >80% during the sewage treatment process.

**Environmental Effects**

**Toxicity to Water Organisms:** This product has low water solubility and should not present a risk to aquatic organisms.

**Toxicity to Soil Organisms:** This product is a solid and does not contain significant concentrations of water soluble constituents that may be leached from the product. It is therefore not likely to present a danger to terrestrial organisms.

**Bioaccumulation:** This product is a solid which is not soluble in water and if ingested will not be absorbed.

**Fate and Effects in Waste Water Treatment Plants**

This product is a solid rubber type material which is unlikely to have any adverse effect on bacteria.

**Ecotoxicity Classification Criteria**

Hazard Parameters (LC50 or EC50)	High	Medium	Low
Acute Aquatic Toxicity (mg/L)	<=1	>1 and <=100	>100
Acute Terrestrial Toxicity	<=100	>100 and <= 2000	>2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

**13. DISPOSAL CONSIDERATIONS**

Can be incinerated in accordance with local regulations.

Call local hazardous waste disposal company or provincial waste authorities for more information.

**14. TRANSPORT INFORMATION**

**Canada Road (Based on IMDG Regulations)**



**DOW CORNING(R) 1199 SILICONE GLAZING SEALANT, CLEAR**

Not subject to local road regulations.

**Ocean Shipment (IMDG)**

Not subject to IMDG code.

**Air Shipment (IATA)**

Not subject to IATA regulations.

Call Dow Corning Transportation, (989) 496-8577, if additional information is required.

**15. REGULATORY INFORMATION**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

WHMIS CLASSIFICATION:            Class D, Division 1, Subdivision B.  
   Class D, Division 2, Subdivision A.  
   Class D, Division 2, Subdivision B.

DSL STATUS:                        Consult your local Dow Corning office.

**16. OTHER INFORMATION**

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

(R) indicates Registered Trademark