
MATERIAL SAFETY DATA SHEET

SECTION 01 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION:

Chemical Name: **NUFLEX® 319 GLAZING SILICONE SEALANT**
Manufacturer: **NUCO INC.**
150 Curtis Drive
Guelph, Ontario N1K 1N5
Tel: (519)-823-4994
Fax: (519)-823-1099
Infotrac 24 Hour Emergency Tel: (800)-535-5053
Date: July 1, 2023
Prepared by: Technical Services Department
WHMIS Classification: D2A, D2B
Product Use: Silicone Sealant and Adhesive

SECTION 02 – COMPOSITION / INFORMATION ON INGREDIENTS:

<u>Ingredients</u>	<u>CAS No.</u>	<u>%</u>	<u>LD50(Oral-Rat)</u>	<u>LC50(Inhalation-Rat)</u>
Amorphous Silica	7631-86-9	7.0 – 13.0	3,160 mg/kg	> 0.139 mg/L (4 hr)
Methyl Tri(methylethylketoxime)silane	22984-54-9	3.0 - 7.0	2 – 3 ml/kg	> 50 mg/L (4 hr)
Dibutyl Tin Dilaurate	77-58-7	0.1 – 1.0	175 mg/kg	Not available
Octamethylcyclotetrasiloxane	556-67-2	0.1 – 1.0	1,540 mg/kg	36 mg/L (4 hr)

The ingredients listed above are controlled products as defined in CPR, am. SOR/88-555 or 29 CFR 1910.1200

SECTION 03 – HAZARDS IDENTIFICATION:

ROUTES OF ENTRY INTO THE BODY (ACUTE EFFECTS):

Eyes: Direct contact may cause mild irritation.
Skin: May cause moderate irritation. Repeated skin contact may cause allergic skin reaction.
Inhalation: Irritates respiratory passages very slightly. Vapor overexposure may cause drowsiness and prolonged overexposure may injure blood and liver.
Ingestion: Low ingestion hazard in normal use. Repeated ingestion may injure internally.

WHMIS HAZARD SYMBOL(S):



SECTION 04 - FIRST AID MEASURES:

Eyes: Flush with copious quantities of lukewarm water. Do not attempt to physically remove the solids or gums from the eye. Seek medical attention immediately.
Skin: Remove contaminated clothing. Wash thoroughly with warm water and non-abrasive soap. Seek medical attention if you feel ill or a reaction develops.
Inhalation: Remove to fresh air and provide water. Seek medical attention if you feel ill or a reaction develops.
Ingestion: Get medical attention.

SECTION 05 - FIRE FIGHTING MEASURES:

Flammable Conditions: Avoid direct sources of heat or ignition in uncured state.
Extinguishing Media: Carbon dioxide, dry chemical, water fog or foam. 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.
Flash Point: Not applicable

Flammability Limits:	Lower Explosion Limit - not available Upper Explosion Limit - not available
Autoignition Temperature:	Not available
Hazardous Decomposition Products:	Carbon dioxide, silicone dioxide, metal oxides, nitrogen oxides, formaldehyde, and traces of incompletely burned carbon products.
Sensitivity - Impact:	None
Static:	None

SECTION 06 – ACCIDENTAL RELEASE MEASURES:

Containment / Clean Up:	Restrict access to the area of the spill. Provide ventilation, NIOSH / MSHA approved respirator and protective clothing. Scrape up sealant and place in container for disposal. Clean area as appropriate since silicone materials can represent a slip hazard. Cleaning may require steam or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state, 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.
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SECTION 07 – HANDLING AND STORAGE:

Handling and Storage:	Store in an adequately ventilated area under dry conditions between 50°F (10°C) to 77°F (25°C) and keep container tightly sealed when not in use.
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SECTION 08 – EXPOSURE CONTROL / PERSONAL PROTECTION:

Component Exposure Limits:	<u>Methyl Tri(methylethylketoxime)silane (CAS# 22984-54-9)</u> forms Methyl Ethyl Ketoxime (CAS# 96-29-7) upon contact with atmospheric moisture. Provide adequate ventilation to control exposures within the following exposure guidelines: Vendor Guide TWA: 3 ppm, STEL: 10 ppm; AIHA WEEL TWA: 10 ppm. <u>Amorphous Silica (CAS# 7631-86-9):</u> Although the silica is coated with the silicone sealant observe the particulate limits. OSHA PEL: TWA 80 mg/m ³ / SiO ₂ . NIOSH REL: TWA 6 mg/m ³ . <u>Dibutyl Tin Dilaurate (CAS# 77-58-7):</u> Provide adequate ventilation to control exposures within the following exposure guidelines: OSHA PEL and ACGIH TLV: 0.1 mg/ m ³ ; ACGIH STEL: 0.2 mg/ m ³ <u>Octamethylcyclotetrasiloxane (CAS# 556-67-2):</u> Provide adequate ventilation to control exposures within the following exposure guidelines: ACGIH TLV: TWA 10 ppm, STEL 15 ppm; OSHA PEL: TWA 10 ppm.
Respiratory:	Wear an organic vapor NIOSH / MSHA approved respirator.
Ventilation:	In indoor applications, passive ventilation (opening of doors and windows) is recommended. Local exhaust as necessary to keep exposure levels within guidelines.
Personal Protective Equipment:	Safety glasses with side-protection, impermeable gloves (e.g., neoprene, nitrile, silver shield (R)), coveralls or apron are important in preventing contamination of eyes, skin and clothing. Wash thoroughly after handling.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES:

Physical State:	Paste
Odor and Appearance:	Low odor, thixotropic sealant
Odor Threshold:	Not available
Specific Gravity:	1.04
Vapor Pressure:	Less than 5 mm Hg
Vapor Density:	Greater than 1
Evaporation Rate:	Not available
Boiling Point:	Not applicable
Freezing Point:	Not applicable
pH:	Not available
Coeff. Oil/Water Distribution:	Not available

SECTION 10 – STABILITY AND REACTIVITY:

Chemical Stability:	Stable
Incompatible Materials:	Strong oxidizing agents or electrophiles (e.g. ferric chloride). Concentrated acids or bases can degrade the silicone polymer.

Reactive Conditions: Moisture and incompatible materials.
Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION:

Effects of overexposure: The curing vapor, Methyl Ethyl Ketoxime (CAS# 96-29-7), may cause drowsiness, injure blood, liver and may irritate or harm nose, throat, lungs and eyes. Direct contact with eyes will irritate. Direct contact with skin may irritate.

Sensitization: Allergic skin sensitization possible through repeated direct contact with the ketoxime in the uncured sealant.

Carcinogenicity: No ingredients considered by IARC, NTP or OSHA to be carcinogens. Male rodents exposed to Methyl Ethyl Ketoxime (CAS# 96-29-7) vapor throughout their lifetime developed liver carcinomas. These carcinomas were statistically increased at a concentration of 375 ppm.

Reproductive Toxicity: Evidence of reproductive effects in laboratory animals when exposed to Octamethylcyclotetrasiloxane (CAS# 556-67-2) by inhalation at concentrations of 500 ppm or higher for 70 days prior to mating. Methyl Ethyl Ketoxime (CAS# 96-29-7) is not considered a reproductive or developmental toxin based on studies on rats.

Teratogenicity: Dibutyl Tin Dilaurate (CAS# 77-58-7) shows evidence of teratogenicity in laboratory animals.

Mutagenicity: Methyl Ethyl Ketoxime (CAS# 96-29-7) is not considered mutagenic or genotoxic based on in vivo and in vitro studies.

Synergistic Products: No known applicable information.

SECTION 12 – ECOLOGICAL INFORMATION:

Air: Complete information is not yet available.
Water: Complete information is not yet available.
Soil: Complete information is not yet available.

SECTION 13 – DISPOSAL CONSIDERATIONS:

Waste Disposal: Dispose in accordance with Federal, State / Provincial and local regulations.

SECTION 14 - TRANSPORT INFORMATION:

Shipping Information: Not subject to DOT, TDG, IMDG Code or IATA Regulations.

SECTION 15 - REGULATORY INFORMATION:

TSCA Inventory Status: Chemical components listed on TSCA inventory except as exempted.

NFPA Profile: Health 2, Flammability 1, Reactivity 0

SARA TITLE III Chemical Listings: Section 302 Extremely Hazardous Substances (40 CFR 355): None
Section 304 CERCLA Hazardous Substances (40 CFR 302): None
Section 311/312 Hazard Class (40 CFR 370): Acute: Yes; Chronic: Yes; Fire: No; Pressure: No; Reactive: No
Section 313 Toxic Chemicals (40 CFR 372): None present or none present in regulated quantities.

State Substance List: This product contains a listed substance(s) that appears on one or more of the Substance Lists for Pennsylvania, Massachusetts and New Jersey: amorphous silica (CAS# 7631-86-9); methyl tri(methylethylketoxime)silane (CAS# 22984-54-9); dimethylsiloxane, hydroxy terminated (CAS# 70131-67-8); dimethylsiloxane, trimethylsiloxy terminated (CAS# 63148-62-9).

California Proposition 65 List: No known applicable information

Volatile Organic Content: 26 grams per liter (0.22 lb / gallon), 2.5% by weight (CARB Method 310)

Domestic Substance List: Chemical components listed on DSL except as exempted.

SECTION 16 - OTHER INFORMATION:

The information herein is given in good faith, but no warranty, express or implied, is made. Product users should make independent judgements of the suitability of this information to ensure proper use and to protect the health and safety of employees.

Form: MSDSNUFLEX319GLAZINGSILICONESEALANT Rev.: 8 Date: 06/08