

**GC Electronics**  
1801 Morgan Street  
Rockford, IL 61102  
Phone: (815) 968-9661  
Fax: (815) 968-9731  
www.gcelectronics.com

**Product Name:Silicone Rubber**  
MSDS Number:149  
Revision Date: 8/22/06  
Supersedes Date:1/10/01

## MATERIAL SAFETY DATA SHEET

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Type: Sealant  
Product Name: **Silicone Rubber**  
Part Number(s): **10-150**  
**SD-151**

Emergency Contact: **Chemtrec**  
Phone (24 hours): **(800) 424-9300**

### Section 1 - Identification of Product

HMIS		NFPA		Least	0
Health	1	Health	1	Slight	1
Flammability	1	Flammability	1	Moderate	2
Reactivity	0	Reactivity	0	High	3
Personal Protection B				Extreme	4
Note: NFPA=National Fire Protection Association				Gloves,Safety Glasses	B
Generic Description: Silicone Elastomer					

### Section 2 - Hazardous Ingredients

Component Name:	CAS#	Wt.%	Exposure Limits
Methyltriacetoxysilane	4253-34-3	1.0-5.0	See comments below
Ethyltriacetoxysilane	17689-77-9	1.0-5.0	See comments below
Silica, Amorphous	7631-86-9	10	OSHA PEL: TWA 6 MG/M3 ACGIH TLV: TWA 10 MG/M3 Total Dust

The above components are hazardous as defined in 29 CFR 1910.1200

Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL:TWA 10ppm and ACGIH TLV: TWA 10ppm, STEL 15ppm.

### Section 3 - Physical Data

Physical Form:	Paste
Color:	Clear
Odor:	Acetic acid-like
Specific Gravity @ 77°F/25°C:	1.02
Melting Point:	Not applicable
Boiling Point (@ 760 MM HG):	Not applicable
Vapor Pressure @ 77°F/25° C):	Less than 5mm
Vapor Density (Air-1@77°F/25° C):	Not applicable
Solubility in Water (%):	Less than 0.1
% Volatile Content by Weight	Less than 5
Evaporation Rate (Ether=1)	Not applicable

Note: The above information is not intended for use in preparing product specifications.

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**Section 4 - Fire & Explosion Hazard Data**

Flash Point :	Not applicable
Auto-ignition:	Not determined
Flammability Limits in air:	Lower: N/D Upper: N/D
Comments N.D.:	Product is considered a solid for DOT purposes and flash point is not applicable.
Extinguishing Media:	Water fog, dry chemical, foam, CO <sub>2</sub> .
Special Fire and Explosion Procedures:	Self contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals.
Unusual Fire and Explosion Hazards:	None known
Hazardous Decomposition Products:	Thermal breakdowns of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Silicon dioxide. Carbon dioxides and traces of incompletely burned carbon compounds. Formaldehyde

**Section 5 - Health Hazard Data**

Acute Effects of Overexposure:	
Eye:	Direct contact irritates slightly with redness and swelling.
Skin:	A single short exposure (less than 24 hours) may irritate. Repeated or prolonged contact (24 to 48 hours) may cause irritation moderately.
Inhalation:	Vapor overexposure may irritate eyes, nose and throat.
Oral:	Small amounts transferred to the mouth by fingers during use, etc., should not injure. Swallowing large amounts may cause digestive discomfort.
Comments:	No injury from dusts should occur during reasonable use. If use creates respirable particles, some respiratory system injury may occur. Cured sealant is nonhazardous.

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. Overexposure to any chemical may result in enhancement of pre-existing adverse medical conditions and allergic reactions.

**First Aid Measures:**

Eye:	Immediately flush with water for 15 minutes. Get medical attention.
Skin:	Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist.
Inhalation:	Remove to fresh air. Get medical attention if ill effects persist.
Oral:	No first aid should be needed.
Comments:	None.

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**Section 6 - Reactivity Data**

Chemical Stability:	Stable
Hazardous:	Hazardous polymerization will not occur.
Polymerization Conditions to Avoid:	Not applicable
Materials to Avoid:	Oxidizing material can cause a reaction. Water, moisture or humid air can cause hazardous vapors to form as described in Section 8.

**Section 7 - Spill or Leak Procedures**

Container Clean up:	Observe all personal protection equipment recommendations described in Section 4 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean areas as appropriate since some silicone materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning material appropriately, since spontaneous heating may occur. Local, state and federal regulations may apply to release and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable.
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**D.O.T. (49CFR 171.8)/E.P.A. (40 C.F.R.117) Spill Reporting Information**

Hazardous Substances:	None
Reportability Quantity:	Not applicable
Concentration of Hazardous Substance:	Not applicable.
Reportable Quantity of Product:	Not applicable

Comments:	Product contains no ingredients subject to D.O.T. or E..P.A. CERCLA/SARA Environment release reporting regulations.
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Note: See section 8 for Personal Protective Equipment for Spills.

**Section 8 - Special Protection Information****Personal Protective Equipment for Routine Handling:**

Eyes:	Use proper protection-safety glasses as a minimum
Skin:	Wash at mealtime and end of shifts. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.
Suitable Gloves:	Silver Shield (4) 4H (R).
Inhalation/Suitable Respirator:	No respiratory protection should be needed.

**Person Protective Equipment for Spills:**

Eyes:	Use proper protection-safety glasses as a minimum
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**Skin\*:** Wash at mealtime and end of shifts. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective (rubber or plastic) gloves are recommended.

**Inhalation/Suitable respirator:** Use respiratory protection unless local exhaust ventilation is adequate or air sampling data show exposures are within TLV and PEL guidelines.

**Ventilation:** Local Exhaust: Recommended

**Mechanical (General):** Recommended

**Suitable Respirator:** Organic vapor type

**Precautionary Measures:** Avoid eye contact. Avoid skin contact. Use reasonable care.

**Comments:** Avoid breathing vapors and eye and skin contact. Use only with adequate ventilation. Do not take internally.

**Comments:** Product forms acetic acid (HOAC) when exposed to water or humid air. Provide ventilation during use to control HOAC within exposure guidelines or use respiratory protection. When heated to temperatures above 150°C in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose, throat, skin and digestive system. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA Permissible Exposure Limit for formaldehyde.

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

\*Good practice requires that gross amounts of any chemical be removed from the skin as soon as practical, especially before eating or smoking.

<b>Section 9 – Special Precautions</b>
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Precautions to be taken in Handling and Storage:

Store below 90°F/32°C. Use with adequate ventilation. Product forms acetic acid (HOAC) when exposed to water or humid air. Provide ventilation during use to control HOAC exposure within 10ppm (current TLV) guidelines or use respiratory protection. Avoid eye contact. Avoid skin contact. Use reasonable care and store away from oxidizing materials. Keep container closed when not in use and store away from water or moisture.

Comments:

Traces of formaldehyde (carcinogen) may form if heated in air above 300°F/149°C. Provide ventilation to control vapor exposure within inhalation guidelines when handling at elevated temperatures. Review the OSHA formaldehyde regulations for detailed information on safe handling requirements.

<b>Section 10 - Regulatory Information</b>
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DOT Road Shipment Information  
 (49 CFR 172.101):  
 Ocean Shipment (IMDG): Odor:

Not subject to DOT  
 Not subject to IMDG code

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Air Shipment (IATA): Not subject to IATA regulations

**Component Exposure Limit:**

CAS#	Component	Exposure Limit
4253-34-3	Methyltriacetoxysilane	See acetic acid comments
17689-77-9	Ethyltriacetoxysilane	See acetic acid comments

Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10ppm and ACGIH TLV: TWA 10ppm, STEL 15ppm.

**Engineering Controls**

Local Ventilation: None should be needed  
 General Ventilation: Recommended

Traces of formaldehyde (carcinogen) may form if heated in air above 300°F/149°C..

Provide ventilation to control vapor exposure within inhalation guidelines when handling at elevated temperatures. Review the OSHA formaldehyde regulations for detailed information on safe handling requirements.

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA inventory of Chemical Substances.

**EPA SARA Title III Chemical Listings****Section 312 Hazard Class Immediate**

Acute: Yes  
 Chronic: No  
 Fire: No  
 Pressure: No  
 Reactivity: No

**Section 313 Toxic Chemicals:**

None present or none present in regulated quantities.

**Supplemental State Compliance Information****California:**

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known

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	<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
Massachusetts:	7631-86-9	<=10.0	Silica, amorphous
New Jersey:	70131-67-8	<=87.0	Dimethyl siloxane, hydroxy-terminated
	7631-86-9	<=10.0	Silica, amorphous, fumed: #1655
	4253-34-3	1.0 – 5.0	Methyltriacetoxysilane
Pennsylvania:	17689-77-9	1.0 – 5.0	Ethyltriacetoxysilane
	70131-67-8	<=87.0	Dimethyl siloxane, hydroxy-terminated
	7631-86-9	<=10.0	Silica, amorphous

<b>Disclaimer</b>
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