

**GC Electronics**  
 1801 Morgan Street  
 Rockford, IL 61102  
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**Product Name: Silicone Rubber**  
 MSDS Number: 149  
 Revision Date: 2/3/2010  
 Supersedes Date: 8/22/06

**MATERIAL SAFETY DATA SHEET**

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200

Product Type:	Sealant	Emergency Contact:	Chemtrec
Product Name:	<b>Silicone Rubber</b>	Phone (24 hours):	<b>(800) 424-9300</b>
Part Number(s):	<b>10-150</b> <b>SD-151</b>		

**Section 1 - Identification of Product**

HMIS		NFPA		Least	0
Health	2	Health	2	Slight	1
Flammability	0	Flammability	0	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
Dimethyl Polsiloxane Silanol/St	70131-67-8	60-80	See comments below
Silica, amorphous	7631-86-9	10	OSHA PEL: TWA 6 MG/M3 ACGIH TLV: TWA 10 MG/M3 Total Dust
Dimethylpolysiloxane	63148-62-9	5-10	See comments below
Methyltriacetoxysilane	4253-34-3	1.0-5.0	See comments below
Ethyltriacetoxysilane	17689-77-9	1.0-5.0	See comments below

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.

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**Section 3 – Physical Data**

Physical Form:	Solid
Color:	Clear
Odor:	Acetic acid-like (vinegar)
Specific Gravity (water = 1):	1.01
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 @ 20°C:	Insoluble
Evaporation Rate (Butyl acetate = 1)	<1
% Volatile by volume:	<8
VOC (EPA METH.24) (G/L):	31
Density (Kg/M <sup>3</sup> )	1040
Solubility in Organic Solvent:	Toluene

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

**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:** Avoid contact with eyes. Direct contact irritates slightly with redness and swelling.

**Skin:** Contact with uncured product may irritate 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. Causes mild respiratory irritation in uncured state.

**Oral:** Contact with uncured product will irritate lips, gums and tongue. 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 non-hazardous.

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:**

**Ingestion:** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**Eye:** Immediately flush with water for 15 minutes. Get medical attention.

**Skin:** Remove from skin with a dry cloth or paper towel 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.

**Note to physicians:** None known.

### Section 6 - Reactivity Data

**Chemical Stability:** Stable

**Hazardous thermal decomposition/Combustible products:** Hazardous polymerization will not occur.  
Carbon monoxide, carbon dioxide, silicone dioxide, acetic acid, formaldehyde.

**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.

#### 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.

**Note:** See section 8 for Personal Protective Equipment for Spills.

### Section 8 - Special Protection Information

**Engineering controls:** Eye-wash station. Use in well-ventilated area. Localized ventilation should be used to control dust levels.

#### 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.

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**Person Protective Equipment for Spills:**

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 (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. 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 (300°F) 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.

**Section 9 – Special Precautions**

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 (during application and curing). Provide ventilation during use to control HOAC exposure within 10ppm (current TLV) guidelines or use respiratory protection. Avoid eye contact. Caution: remove contact lenses before using this product. Do not handle lens until all sealant has been cleaned from the fingertips, nails and cuticles. Residual sealant may remain on fingers for several days and transfer to lenses and cause severe eye irritation. 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.

**Section 10 - Regulatory Information**

DOT Road Shipment Information  
(49 CFR 172.101):

Not subject to DOT

Ocean Shipment (IMDG): Odor:

Not subject to IMDG code

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.

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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

	<u>CAS Number</u>	<u>Wt%</u>	<u>Component Name</u>
Massachusetts:	7631-86-9 7.0	13.0	Silica, amorphous
New Jersey:	70131-67-8	>60.0	Dimethyl siloxane, hydroxy-terminated
	7631-86-9 7.0	13.0	Silica, amorphous, fumed: #1655
	4253-34-3	1.0 – 5.0	Methyltriacetoxysilane
	17689-77-9	1.0 – 5.0	Ethyltriacetoxysilane
Pennsylvania:	70131-67-8	>60.0	Dimethyl siloxane, hydroxy-terminated
	7631-86-9	7.0-13.0	Silica, amorphous

**Disclaimer**

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