

ROOM TEMPERATURE VULCANIZING

RoHS™ Silicone Rubber Adhesive/Sealant



One-component elastomer cures to a tough, rubbery solid when exposed to moisture in the air. Designed to fulfill industrial and electronic service sealing and bonding requirements, this sealant has excellent adhesive strength, high elongation and outstanding insulation and heat resistance qualities. Develops primerless adhesion to a variety of materials, including metal, glass, most wood, silicone resin, vulcanized silicone rubber, ceramic, natural and synthetic fibers; most plastics and painted surfaces. Resists weathering, vibration and exposure to oil, moisture, ozone, and temperatures from sub-zero to 400°F. Cures to a tack-free surface in 10 minutes. Full cure, 24 hours. Ideal for many sealing, bonding and insulating applications, including general electrical insulation, potting exposed electronic components, bonding gaskets for heating and refrigeration units, formed-in-place gaskets for gear boxes, compressors, pumps and outdoor motor covers, pressure sealing of aircraft cabins and cockpits, caulking sheet metal stacks, ductwork and equipment housings, and as an anti-abrasion coating.

As Cured—Electrical

ASTM D 257 Volume Resistivity, ohm-cm – 6 X 10¹⁴

ASTM D 149 Dielectric Strength, volts/mil – 635

ASTM D 150 Dielectric Constant, at 60 Hz – 2.8 at 100 Hz – 2.8 at 100 kHz – 2.8

ASTM D 150 Dissipation Factor, at 60 Hz – 0.0015 at 100 Hz – 0.0015 at 100 kHz – 0.0015

Silicone Rubber Sealant meets the following requirements:

FDA: FDA regulation No. 21 CFR 177.2600 when fully cured and washed.

UL: Recognized for service to 302°F (150°C) where elongation is not necessary.

Meets Mil. Spec. Mil-A-46106A Type 1,

Meets Fed. Spec. TT-S-001543A, Class B, TT-S-0230C, Type 2, Class B

Part No. 10-150 3 fl. oz. Tube w/Dispensing Nozzle, Clear



Part No. 19-155



Part No. 19-158



Part No. 19-159

Electronic Grade Silicone Sealant/Adhesive



One part non-corrosive, neutral cure electronic grade silicone sealant. Will remain flexible from -70° F to +400° F. (-57° C to +204° C) An excellent adhesive for many electrical and electronic applications where corrosion to metals is a problem. Good dielectric properties, high surface resistivity and resists electrical tracking. Meets the requirements of Mil-A-46146A-Type 1; meets the requirements of FDA status, FDA regulation #177.2600

Part No. 19-155 3 fl. oz. Color: Clear

Part No. 19-158 10.2 fl. oz. Caulk Tube, Color: White

Part No. 19-159 2.8 fl. oz. Cartridge Color: White



High Temperature Silicone Sealant/Adhesive

GC High Temperature Silicone/Adhesive is a one-part moisture-curing RTV (room temperature vulcanizing) silicone sealant/adhesive that cures to form a tough, rubber-like seal. It has been specifically formulated to be used where operating temperatures up to 310°C (590°F) are reached intermittently. The primary uses for this product are high temperature insulation and “formed-in place gasket” applications. At conditions of 25°C (77°F) and 50% relative humidity, the sealant will skin in 10 minutes and cure within 24 hours (1/4" bead), ultimate cure in 7 days. Meets Mil. Spec. Mil-A-46106A Type 1

Part No. 19-157 10.2 fl. oz. Caulk Tube, Color: Red



Silicone Caulk Tube

GC Industrial RTV Silicone is a one-part high modulus Sealant/Adhesive and Gasketing material. Remains flexible from -80°F to +400°F (-62°C to +204°C). Will not crack, crumble or dry out. Unaffected by ultra-violet, weather, most chemicals and solvents. Adheres to metal, wood, glass, fiberglass, ceramics, fabrics and many plastics. Meets the following specifications: Agriculture Canada; USDA; FDA regulation No. 21 CFR 175.105; Mil Spec Mil-A-46106A-Type1 and US Fed. Specs. TT-S-001543A Class B and TT-S-0230C Type 2, Class B.

Part No. EL-615 10.2 fl. oz. Caulk Tube, Clear

Silicone Quick Reference Guide

Description	10-150	19-155	19-157	19-158	19-159	EL-615
Non Corrosive	-	X	-	X	X	-
High Temperature	-	-	X	-	-	-
Extreme High Temp	-	-	X	-	-	-
Low Temperature	X	X	X	X	X	X
Extreme low temp	X	X	X	X	X	X
Thermal Conductivity	-	-	-	-	-	-
High Strength	X	-	X	-	-	X
Super High Strength	-	X	-	X	X	-
High Voltage	-	X	-	X	X	-
Paste	X	X	X	X	X	X
Flowable	-	-	-	-	-	-
One Part	X	X	X	X	X	X
Primerless	X	X	X	X	X	X
Translucent	X	X	-	-	-	X
Red	-	-	X	-	-	-
White	-	-	-	X	X	-
Adhesive	X	X	X	X	X	X
Sealant	X	X	X	X	X	X
Potting	-	-	-	-	-	-
Encapsulating	-	-	-	-	-	-
Elect. Insulation	X	X	X	X	X	X
Form In Place Gasket	X	X	X	X	X	X
Food Grade	X	X	X	X	X	X
Marine	X	-	-	-	-	X
Mil Spec	X	X	X	X	X	X

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

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.

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 ₂ .
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.

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