CHEMICALS



TEMPERATURE VULCANIZING ROOM



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. 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



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

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: Solvent Release Adhesive RTV Product Name: Silicone Sealant/Adhesive

Part Number(s): 19-155

Section 1 - Identification of Product

NFPA		Least	0
Health	1	Slight	1
Flammability	1	Moderate	2
Reactivity	0	High	3
Personal Protection	n B	Extreme	4

Gloves, safety glasses B

Note: NFPA is National Fire Protection Association

Chemical Identification: Organopolysiloxane mixture

Section 2 -	Hazardous	Ingredients
-------------	-----------	-------------

CAS#	Wt.%	Component	Exposure Limits	
007631869	9	Silic a, amorphous	Observe particulate limits. OSHA PEL: TWA 15mg/m3	
			total dust, 5mg/m3 respirable fraction. ACGIH TLV:	
			TWA 10mg/m3 inhalable particulate, 3mg/m3 re-	
			spirable particulate.	
022984549	3	Methyl tri (ethylmethylketoxime)		
		silane	See methyl ketoxime comments	
083817725	1	Di (ethylmethylketoxime)	·	
		Methoxymethyl silane	See ethylmethylketoxime and methyl alcohol comments	
101371000	.5	Ethoxy tri (ethylmethylketoxime)		
		silane	See ethyl alcohol and ethylmethylketoxime comments	
093917750	.4	Diethoxy di (ethylmethylketo	oxime)	
		silane	See ethyl alcohol and ethylmethylketoxime comments	
000096297	.1	Methylethylketoxime	Vendor guide: TWA 3ppm, STEL 10ppm, AIHA	
		• •	WEEL: TWA 10ppm	
034206401	.1	Tetra (methylethylketoxime)	* *	
		silane	See ethylmethylketoxime comments	
101371011	.1	Triethoxy (ethylmethylketoxime)		
		silane	See ethylmethylketoxime comments	
		~	~ · · · · · · · · · · · · · · · · · · ·	

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

Part Number(s): 19-155 Page 1 of 6

MSDS Number:201

Ethylmethylketoxime is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within the following guidelines: Vendor guide TWA:3ppm, STEL:10ppm AIHA WEEL TWA: 10ppm. Ethylalcohol is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL and ACGIH TLV: TWA 1000ppm.

Section 3 - Physical Data

Boiling Point: Not applicable Vapor Pressure: Negligible (25°C)

Vapor Density (air=1): >1

Specific Gravity:1.04 (25°C)Melting Point:Not applicableEvaporation Rate:<1 (Butyl Acetate=1)</td>

Solubility in Water: Not soluble

Appearance (color): Milk-white, translucent

Appearance (form); Paste
Odor: Oxime odor

Section 4 - Fire & Explosion Hazard Data

Flash Point (method

used): Not applicable. Solid

Flammable Limits: [Methylethylketoxime: Decomposed product]

Lower: Not measured Upper: not measured

Extinguishing

Media: Foam, dry chemical or carbon dioxide or fine water spray.

Special Fire Fighting

Procedure: Not required

Unusual Fire and

Explosion Hazard: None

Section 5 - Health Hazard Data

Hazards Classification: None (based on IMO)

Fire and Explosion: Not considered flammable nor combustible, but will burn if involved in a fire.

Potential Health Effect:

Inhalation: Narcotic by evolved vapor

Skin Contact: On direct contact uncured product or its vapor may cause slight irritation to

skin.

Eye Contact: On direct contact uncured product or its vapor may cause slight irritation to

eves.

Ingestion: No information is available

First Aid Measures:

Inhalation: Remove to fresh air

Part Number(s): 19-155 Page 2 of 6

MSDS Number:201

Work/Hygienic Practices: Wash hands after handling. Keep away from heat and flame. Avoid contact

with eyes and prolonged or repeated skin contact. Avoid contact with acidic,

basic or oxidizing materials.

Section 9 – Special Precautions

Precautions to be taken in Handling and

Storage:

Use with adequate ventilation. Product evolves methylethylketoxime (MEKO) when exposed to water or humid air. Provide ventilation during use to control methylethylketoxime (MEKO) within exposure guidelines or use respiratory protection. Product evolves methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within guidelines or use air-supplied or self-contained breathing apparatus. Product evolves ethyl alcohol on exposure to water or humid air. Provide ventilation during use to control ethanol within exposure guidelines.

Can be land-filled for cured product or burned in a chemical incinerator equipped with afterburner and scrubber. Do not dispose the emptied container unlawfully. Observe all federal, state and local laws.

Section 10 - Regulatory Information

Hazard Class: Not Regulated

Toxic Substances Control Act (TSCA) Status: Listed on the TSCA inventory

European Inventory of Existing Commercial Substances (EINECS) Status: Listed on the EINECS

Labeling According to EC-Regulations Required:

Symbol: Not required R-Phrase: Not required S-Phrase: Not required Contains: None

Superfund Amendments and reauthorization to of 1986 (SARA) Title III Section 313 Supplier Notification:

This regulation required submission of annual reports of toxic chemical(s) that appear in section 313 of the emergency planning and community Right-To-know Act of 1986 and 40 CFR 372. This information must be included in all MSDS's.

The toxic chemical(s) contained in this product are: Chemical Name (CAS No.) and Contents: None

California Proposition 65:

This regulation requires a warning for California Proposition 65 Chemical(s) under the stature.

The California Proposition 65 Chemical(s) contained in this product are:

Chemical Name/(CAS No.) and Contents: None UN No.: None IMO Classification and Class: None Packaging Group: None Proper Shipping Name: None Technical Shipping Name: None

Marine Pollutant: None

DOT Reportable Quantity (RQ):

Part Number(s): 19-155