

PRODUCT SPECIFICATIONS SHEET

CAT NO. PRODUCT NAME

19-160 GC Electronic Grade Self-Leveling Potting Silicone Sealant 10.2 fl.oz.

DESCRIPTION:

Electronic Grade Self-Leveling Silicone is a one-component, RTV (room temperature vulcanizing) product that uses a new cross-linking mechanism as a curing method. No acetic acid or other corrosive by-products are generated during its cure. Thus, 19- 160 can be used in corrosion-sensitive electrical and/or electronic equipment with no adverse effect.

Supplied ready to use, 19-160 cures at room temperature to form a tough, high-modulus rubber.

TYPICAL USES:

19-160 is primarily used in applications where a flowable, self-leveling silicone sealant is required to fill small gaps or voids. Applications include potting electrical terminals and coating electrical devices.

Since no undesirable odors are released during cure, 19-160 is ideal where applications must be done under confined conditions. Adequate ventilation should be provided with extensive use of this product.

DIRECTIONS:

19-160 is ready to use and requires no mixing or additives. The cure mechanism begins as soon as the sealant comes in contact with the air. Uncured sealant will flow until a cured skin is formed.

At conditions of 25°C (77°F) and 50% relative humidity, the sealant will skin in 30 minutes and cure within 24 hours (1/8" thickness). Higher humidity accelerates cure.

In applications where partial or total confinement of sealant is prevalent, the time required for proper cure is generally lengthened by the degree of confinement.

SURFACE PREPARATION:

All surfaces should be clean and dry. It is recommended that bonding surfaces be solvent wiped with a naphtha, ketone or chlorinated solvent. Suitable solvents include xylol, toluol and mineral spirits. Do not solvent wipe with alcohols or oil-containing solvents such as Varsol. Allow surface to dry thoroughly before applying sealant.

PAINTING:

19-160 should not be applied to surfaces that will be painted, as painting over sealant is not recommended. The paint film does not stretch and the adhesion of paint to 19- 160 is not adequate.

COLORS:

19-160 is available in clear.

FDA STATUS:

19-160 is permitted under regulations of the Food and Drug Administration where incidental food contact might be involved. FDA Regulation number is 177.2600.

MILITARY SPECIFICATIONS:

19-160 meets the requirements of MIL- 46106 Type II.

TYPICAL PROPERTIES:**UNCURED:**

Type	One-part, self-levelling RTV
Appearance	Smooth, thick liquid
Specific Gravity	Clear 1.02
Application Temperature Range	-18°C to +50°C (0°F to +120°F)
Cure Method	Neutral, non-corrosive, moisture cure
Skin Over Time	40 minutes
Cure Time	24 hours (1/8" thickness)
Slump/Sag	Flowable

CURED:

At 25°C (77°F) and 50% R.M. for 7 days (1/8" thick)	
Durometer Hardness (shore A) (ASTM D2240)	25
Tensile Strength (ASTM D412)	230 psi (1.6 MPa)
Elongation at Break (ASTM D412)	400%
Tear Resistance (ASTM D624, Die B)	26 ppi (4.6 kN/m)
Temperature Range After Cure	-57°C to 204°C (-70°F to +400°F)
Shrink Factor	Nil
Thermal Expansion Coefficient	9 x 10 ⁻⁴ 1/K
	0°C to 100°C (32°F to 212°F)
Dielectric Strength (ASTM D149)	452 V/mil (173 KV/cm)
Volume Resistivity (ASTM D257)	>2.19 x 10 ¹⁵ ohm/cm
Dissipation Factor (ASTM D150)	0.00106 at 10 kHz
	0.00022 at 100 Hz
Dielectric Constant (ASTM D150)	71 at 100 Hz
	2.71 at 10 kHz
It remains flexible from (-60 to 200)°C (-75 to 480)°F.	

SAFETY PRECAUTIONS:

19-160 is a neutral cure system, no acetic acid is released during cure.

STORAGE:

19-160 should be stored in original unopened container at or below 32°C (90°F).

SHELF LIFE, CLOSED CONTAINERS

12 months