

NOVAGARD® 600-160

Potting and Encapsulant



GENERAL PROPERTIES

DESCRIPTION

NOVAGARD 600-160 is a two-component silicone that when mixed, cures to a hard elastomer with improved thermal conductivity. This material is ideally suited for application as a general potting compound in power supplies, connectors, industrial controls, and junction boxes.

FEATURES

- Wide range of compatibility
- Low shrinkage
- No exotherm during cure
- Low viscosity
- Excellent dielectric properties
- No solvents or cure byproducts
- No post cure required
- UL 94 V0 Tested (Pending)

INSTRUCTIONS

This material is shipped in separate containers that are labeled Part A and Part B. Part A is the base, and Part B is the cure. While the material may be mixed by hand, it is more appropriate to use automated, meter-mixing equipment as the work life is extremely short and the ultimate cure time is exceedingly fast. The compound is designed with a 1:1 volume:volume mix ratio. Automated mixing equipment eliminates the need for a deaeration cycle. If mixing by hand, weigh 100 parts of Part A in to an appropriately sized mixing vessel; add 100 parts of Part B and mix thoroughly.

STORAGE

NOVAGARD 600-160 may be stored in the original unopened containers at, or below, 80° F (25°C) for up to one year.

BEFORE CURE

Physical Property	Test Method	Performance Range
Appearance	After mixing	Grey
Mix Ratio	Base : Cure (by volume)	1 : 1
Specific Gravity	Mixed, 25°C	1.70 – 1.80
Viscosity	Mixed, 25°C	5,000 – 10,000 cps
Working Time	Mixed, 25°C	<15 minutes
Cure Time		2-3 hours

AFTER CURE (7 Days at 25C / 50% r.h.)*

Physical Property	Test Method	Typical Value
Tensile Strength	ASTM D412	125 psi (minimum)
Elongation	ASTM D412	200 % (minimum)
Shore Hardness (Shore A)	ASTM D 2240	70 - 80
Tear Resistance	ASTM D 624	15 - 25 pli
Volume Resistivity	ASTM D 257	16.7 x 10 ¹⁴ Ω-cm
Dissipation Factor (100 Hz / 100 kHz)	ASTM D 150	0.0034 / 0.0028
Dielectric Constant (100 Hz / 100 kHz)	ASTM D 150	3.39 / 3.40
Dielectric Strength (10 mil gap)	ASTM D 149	400 v/mil

*The values outlined reflect testing that was conducted on laboratory prepared specimens, actual results may vary. The information provided in the above table is not intended for use in preparing specifications. Please consult manufacturer for additional information.

AVAILABILITY

NOVAGARD 600-160 is available in 5 gallon, straight-sided pails or 55 gallon drums. Speak with a Novagard representative for custom packages.

PRECAUTIONS

Certain materials, chemicals, curing agents and plasticizers may inhibit the cure. The most notable are organo-tin catalysts, amino compounds, polysulfide and other sulfur-containing materials. Do not use in or around highly oxidative chemicals such as liquid oxygen, chlorine or peroxides. Not recommended for surfaces that are to be painted.

ADDITIONAL INFORMATION

Novagard believes that the information provided is a true and accurate description of the characteristics of the aforementioned product; however, it is the responsibility of the individual user to thoroughly test the product in their specific application to determine performance, efficacy and safety.

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