Novagard® 600 Series 600-223
Preliminary Specification Data – Technical Data Sheet

NOVAGARD

DESCRIPTION
Novagard 600 Series 600-223 is a 2K (1:1), plasticizer-free product, and after cure, it forms a very soft, compliant, transparent, non-corrosive silicone-encapsulating gel. A pourable or dispensable product with pure resin content near 100%, 600 Series 600-223 can cure at room temperature and can be heat accelerated to increase the cure rate.

FEATURES & BENEFITS
- Transparent
- Heat cure to accelerate the process efficiency.
- Low viscosity allows good flow to small gaps and under-components.
- Soft gel protects the important parts by absorbing mechanical dampness and shock.

APPLICATIONS
A silicone gel for potting and encapsulating, embedding, and coating intricate electronic components. The product offers the following attributes:
- Wide range of compatibility
- Very flexible
- Wide service temperature -40C~200C.

INSTALLATION
This material is shipped in separate containers that are labeled Part A and Part B. While the material may be mixed by hand, it is more appropriate to use automated, meter-mixing equipment and cure with heat. The compound is designed with a 1:1 volume-to-volume or weight-to-weight mix ratio. Automated mixing equipment eliminates the need for a deaeration cycle. If mixing by hand, weigh 50 parts of Part A into an appropriately sized mixing vessel; add 50 parts of Part B and mix thoroughly and de-gas with vacuuming before pouring.

AVAILABILITY
Novagard 600 Series 600-223 is available in 10-ounce jars, 5-gallon pails and 55-gallon drums.

STORAGE
Novagard 600 Series 600-223 has a shelf life of twelve (12) months from the date of manufacture, as indicated by the lot number, when stored in the original, unopened container at, or below, 70°F (21°C).

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. Consult and obey all applicable local, state, and federal regulations for the disposal of solvent and silicone waste. For additional information consult product S.D.S.

PRODUCT SPECIFICATIONS

Physical Property	Test Method	Performance Range
Appearance		Clear
Chemistry		2K Addition Cure Mixed 1:1
Viscosity (cPs) Part A Part B Mixed 1:1	Brookfield HBT #2 @ 20 rpm	 550 450 513
Working Time (Pot Life)	Room Temperature condition	>2 hours
Cure Time	ASTM D3532	72 hours @ RT 3 hours @ 140°F (60°C) 30 minutes @ 212°F (100°C) 15 minutes @ 302°F (150°C)

TYPICAL PROPERTIES*

Physical Property	Test Method	Typical Value
Specific Gravity (g/ml)	ASTM D1875	0.95
Hardness (Shore A)	ASTM D2240	<0
Hardness (Shore 000)	ASTM D2240	16
Thermal Expansion CTE (ppm/°C)	ASTM E831	412

ELECTRICAL PROPERTIES*

Electrical Property	Test Method	Typical Value
Dielectric Strength	ASTM D149	330 V/mil 13.0 kV/mm
Dielectric Constant (100 Hz / 100 kHz)	ASTM D150	2.79 / 2.80
Dissipation Factor (100 Hz / 100 kHz)	ASTM D150	0.0024 / 0.0001
Volume Resistivity (Ω cm)	ASTM D257	1.90E+14

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

ADDITIONAL INFORMATION
Novagard believes that the information provided is a true and accurate description of the typical characteristics of the 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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