Novagard® 500 Series 500-223 Preliminary Specification Data – Technical Data Sheet



DESCRIPTION

Novagard 500 Series 500-223 is a very soft, optically clear, compliant, transparent, non-corrosive, single-component silicone encapsulating gel compound. A pourable or dispensable product with solids content near 100%, 500 Series 500-223 cures at room temperature to a rubbery solid.

APPLICATIONS

TBD

INSTALLATION

As with all single component materials, work life and cure times of Novagard 500 Series 500-223 are dependent upon environmental conditions such as temperature, humidity, and application thickness. Adhesion should be checked on small samples prior to full-scale production.

AVAILABILITY

Novagard 500 Series 500-223 is available in 10 ounce cartridges and 5 gallon pails.

STORAGE

Novagard 500 Series 500-223 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.

PRECAUTIONS

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

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.

Effective Date: 6/16/2022

PRODUCT SPECIFICATIONS

Physical Property	Test Method	Performance Range
Appearance		Optically Clear Liquid
Viscosity	Brookfield HBT #3 @ 20 rpm	14,000 cps
Gel Start Time	1/8" @ 50% RH & 77°F	~20 minutes
Through Cure	1/8" @ 50% RH & 77°F	

TYPICAL PROPERTIES*

Physical Property	Test Method	Typical Value
Specific Gravity		.98
Durometer (Shore 000)	ASTM D2240	40
Tensile Strength	ASTM D412	15 psi
Elongation	ASTM D412	1600%

ELECTRICAL PROPERTIES*

Electrical Property	Test Method	Typical Value
Dielectric Strength	ASTM D149	15.1 kV/mm 383 V/mil
Dielectric Constant at 100 Hz	ASTM D150	0.89
Dielectric Constant at 100 kHz	ASTM D150	0.89
Dissipation Factor at 100 Hz	ASTM D150	0.0014
Dissipation Factor at 100 kHz	ASTM D150	0.00005
Volume Resistivity (Ω cm)	ASTM D257	3.22 x 10 ¹³
Coefficient of Thermal Expansion (µm/m°C)	ASTM E831	
Operating Temperature		-40°C – 200°C

^{*}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 manufacturer for additional information.

ADDITIONAL INFORMATION

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