

DESCRIPTION

Novagard 500 Series 500-09X are non-corrosive when tested in accordance with MIL A-46146A. These singlecomponent silicone-based sealants and/or adhesives provide fast tack-free times, flame and fire resistance, and excellent electrical insulation and arc-resistance properties. They are formulated to conform to UL 94 V0 and V1.

FEATURES & BENEFITS

- Wide range of compatibility
- Single component
- Primerless adhesion
- Excellent dielectric properties
- Room temperature curing
- Solvent-free formulations

APPLICATIONS

Specially formulated to retain their physical properties even during service in extreme environmental conditions, these products are smooth pastes that are ideal for applications that require superior bond strength and flame resistance. Designed primarily for electronics, automotive, and industrial applications, these materials are well suited to sealing and bonding applications to a wide variety of plastic and non-porous substrates.

INSTALLATION

As with all single component materials, work life and cure times of Novagard 500 Series 500-09X 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

Consult your Novagard sales representative for packaging options and volume requirements.

STORAGE

Novagard 500 Series 500-09X may be stored in the original unopened containers at, or below, 70° F for up to twelve (12) months.

PRECAUTIONS

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

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.

PRODUCT SPECIFICATIONS

Physical Property	Test Method	Performance Range
Appearance	Visual	500-090 White Paste 500-092 Black Paste
Extrusion Rate	1/8" orifice; 50 psi	40 gm/minute minimum
Skin Over Time	1/8" @ 50% RH & 77°F	5-15 minutes
Through Cure	1/8" @ 50% RH & 77°F	72 hours maximum

TYPICAL PROPERTIES*

Physical Property	Test Method	Typical Value
Specific Gravity		1.30 – 1.40
Tensile Strength	ASTM D412	200 – 300 psi
Elongation	ASTM D412	325% 425%
Tear Resistance	ASTM D624	30 – 35 pli
Shore Hardness	ASTM D2240	35 ± 5 A
Thermal Conductivity	NG Test Method	0.67 W/m-K
Volume Resistivity	ASTM D257	8.41 x 10 ¹³ Ω-cm
Dissipation Factor (100 Hz / 100 kHz)	ASTM D150	0.0035 / 0.0033
Dielectric Constant (100 Hz / 100 kHz)	ASTM D150	3.24 / 3.26
Dielectric Strength 10 mil gap	ASTM D149	494 v/mil
Adhesion Glass Aluminum	ASTM C794	15 - 20 pli 15 - 20 pli
Flammability Class	UL 94	Black - V0 White - V1

* The values outlined reflect testing that was conducted under laboratory conditions, actual results may vary.

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.

Effective Date: 03/03/2020

Document Name: TDS Novagard 500 Series 500-09x v1.7