

DESCRIPTION

Novagard 500 Series 500-09X is non-corrosive when tested in accordance with MIL A-46146A. This singlecomponent silicone-based sealant and/or adhesive provides fast tack-free times, flame and fire resistance, and excellent electrical insulation and arc-resistance properties.

FEATURES & BENEFITS

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

APPLICATIONS

Specially formulated to retain the physical properties even during service in extreme environmental conditions, the product is a smooth paste that is ideal for applications that require superior bond strength and flame resistance. Designed primarily for electronics, automotive, and industrial applications, this material is well suited to sealing and bonding applications to a wide variety of plastic and non-porous substrates.

INSTALLATION

As with all single-component materials, the work life and cure times of Novagard 500-09X is 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 container at, or below, $70^{\circ}F$ (21°C) for up to twelve (12) months.

PRECAUTIONS

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.

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 - Preliminary

Physical Property	Test Method	Performance Range
Appearance	Visual	Black Paste
Extrusion Rate (g/min)	1/8" orifice; 50 psi	>50
Skin Over Time (minutes)	1/8" @ 50% RH & 77°F	8
Viscosity (cPs)	Brookfield HB #6 @ 20 rpm	225,000 — 650,000
Through Cure	1/8" @ 50% RH & 77°F	7 days

TYPICAL PROPERTIES*- Preliminary

Physical Property	Test Method	Typical Value
Specific Gravity		1.46
Hardness (Shore A)	ASTM D2240	40 — 55
Tensile Strength (psi)	ASTM D412	650
Elongation (%)	ASTM D412	150
Dissipation Factor (100 Hz / 100 kHz)	ASTM D150	0.0035 / 0.0033
Dielectric Constant (100 Hz / 100 kHz)	ASTM D150	3.24 / 3.26
Adhesion (pli) Glass Aluminum	ASTM C794	15 – 20 15 – 20
Tear Resistance (pli)	ASTM D624	30 – 35
Thermal Conductivity (W/m-K)	ASTM D5470	0.60
Coefficient of Thermal Expansion (CTE) (ppm/ C)	ASTM E831	255
Volume Resistivity (Ω-cm)	ASTM D257	8.40 x 10 ¹³
Chemical Resistance Gasoline Brake Fluid Antifreeze Wheel Cleaner		Yes Yes Yes Yes

CERTIFICATIONS

Physical Property	Test Method	Typical Value	
Flammability Class	UL 94	V0 (pending)	
REACH		Compliant	
PFAS free		Compliant	
VOC		Compliant in 50 States	

* 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: 5/10/2024

TDS Preliminary Novagard 500 Series 500-09X v2.7

