

- Electronics grade / Non-corrosive
- · Sprayable/flowable or paste
- Excellent unprimed adhesion to a variety of industrial and electrical substrates
- High-speed, two-part alkoxy formulations are available
- Ready to use. Room temperature moisture cure results in a tough, resilient, silicone rubber
- Low odor and solvent free with no isocyanates

# NOVAGARD

# 500 Series Electronic Silicone

Novagard 500 Series Electronic Silicones are neutral cure (alkoxy) products suitable for electronics sealing, bonding, and encapsulating applications requiring non-corrosive product. They are available in multiple viscosity profiles depending on the preferred application.



Novagard 500 Series Electronic Silicones with low/medium viscosity are conformal coatings. They are preferable to paste-consistency products where flow coating is the preferred application method and when flow into small crevices and hard to reach places is desired.

High viscosity sealants can be applied on vertical surfaces without sagging. They also have superior gap-filling properties designed to offer superior quality and long-term durability, particularly for their performance upon exposure to hostile environmental conditions.

Two-part alkoxy sealants provide for rapid curing to speed the assembly process.

If we don't have the electronics grade silicone to meet your specifications, we'll use our three decades of silicone experience to custom formulate one for you.

#### **Applications**

- Electrical and general industrial sealing and bonding applications
- Pin/solder joint coverage
- Printed circuit board encapsulation and potting
- Flexible hybrid electronic protection
- · Power electronics encapsulation and potting

# Packaging Information

Novagard 500 Series Electronic Silicones are available in cartridges, pails, and drums. Consult your distributor or salesperson for details.

## Disposal

Consult and obey all applicable local, state, and federal regulations. For additional information, consult product Safety Data Sheet.

#### **Precautions**

Not recommended for surfaces that are to be painted.

Do not estimate weights and measures. Two part silicones are mix ratio sensitive and require accurate metering.

#### 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.

## **Applications**

- · Potting and Encapsulating
- Power Supplies
- Connectors
- Sensors
- · Industrial Controls
- Transformers
- Amplifiers
- · Relays
- High Voltage Resistor Packs
- Junction Box Enclosures
- Cable Splice Kits
- · Electrical Insulation
- Converters/Inverters
- Vibration Damping

#### For Professional Use



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ISO 9001:2015 QMS (with Design) | IATF 16949:2016 QMS (with Design) Certified Women's Business Enterprise | Certified Woman Owned Small Business



# 500 Series Electronic Silicone

# 1-Part Silicone Sealant Properties\*

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Skin-Over Time (min)	Through Cure (hrs)	Viscosity (cPs)	Extrusion Rate (g/min)	Durometer (Shore A)	Tensile (psi)	Elongation (%)	Specific Gravity	Appearance
Sprayable / Flowable								
10-30	48 maximum	2,000- 3,000	-	13 +/- 5	45-65	140 - 160	1.00 - 1.05	Translucent Liquid
20-45	72	35,000- 40,000	-	10 +/- 5	35	460	0.95 - 1.01	Translucent Liquid
Paste								
5-15	72 maximum	-	40	35 +/- 5	200-300	325-425	1.30- 1.40	White or Black Paste
5-15	72 maximum	-	40	25 +/- 5	150 - 200	400-450	1.20- 1.30	White Paste
5-30	72 maximum	-	30	18 +/- 5	175 - 225	950-1050	1.00 - 1.05	Translucent Paste
	10-30 20-45 5-15 5-15	10-30 48 maximum 20-45 72 5-15 72 maximum 5-15 72 maximum 5-30 72	Time (hrs) Cure (cPs)  10-30	Time (hrs) Cure (cPs) Rate (g/min)  Sprayab  10-30 48 2,000- 3,000 -  20-45 72 35,000- 40,000 -  5-15 72 40  5-15 72 40  5-30 72 - 30	Time (min) Cure (hrs) Viscosity (g/min) Rate (g/min) Sprayable / Flowable  10-30 48 2,000-3,000 - 13 +/- 5  20-45 72 35,000-40,000 - 10 +/- 5  Paste  5-15 72	Time (min)         Cure (hrs)         Viscosity (cPs)         Rate (g/min)         Ultrometer (shore A)         Tensile (psi)           10-30         48 2,000- 3,000         -         13 +/- 5         45-65           20-45         72 35,000- 40,000         -         10 +/- 5         35           Paste           5-15         72 maximum         -         40 35 +/- 5         200-300           5-15         72 maximum         -         40 25 +/- 5         150 - 200           5-30         72         -         30 18 +/- 5         175 - 225	Time (min)   Cure (cPs)   Rate (g/min)   Citror (shore A) (psi)   Etongation (sis)	Time (min)         Cure (hrs)         Viscosity (cPs)         Rate (g/min)         Uniformeter (shore A)         tensile (psi)         Elongation (%)         Specific Gravity           10-30         48

<sup>\*</sup>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.

## 2-Part Silicone Sealant Properties\*

Properties	500 - 607					
Before Cure						
Description	Potting and Encapsulant					
Appearance (After Mixing)	Clear					
Mix Ratio - Base: Cure (By Volume)	1 : 1 (1 part A : 1 part B v/v)					
Specific Gravity (Mixed, 25°C) Part A Part B	0.95 - 1.05 0.95 - 1.05					
Viscosity (Mixed, 25°C) Part A Part B	100 - 200 cPs 1,500 - 2,500 cPs					
Gel Time (Mixed, 25°C)	5 - 6 hours					
After Cure (7 Days @ 25°C/50% RH)						
Service Temperature	- 40°C to 205°C (-40°F to 400°F)					
Shore A (ASTM D2240)	13 - 18					
Tear Resistance (ASTM D624)	1.5 - 2.5 pli					
Coefficient of Linear Thermal Expansion (ASTM E831)	6.67 x 10 <sup>-4</sup> /°C					
*The values outlined reflect teeting that was our	ducted under laboratory conditions, actual results may vary. The information provided in					

<sup>\*</sup>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.

