

Novagard® 500 Series 500-600

Specification Data Sheet



DESCRIPTION

RTV 500-600 is a two-component, 100% alkoxy silicone, neutral cure sealant that rapidly builds adhesive and elastomeric strength for industrial assembly. It develops high initial green strength so you don't have to slow your production waiting for a traditional single-component cure. RTV 500-600 sealant allows for the movement of assemblies within minutes of application without silicone transfer or substrate shifting.

RTV 500-600 demonstrates outstanding long-term resistance to natural weathering including extreme temperatures, ultraviolet radiation, rain, and snow, with negligible change in elasticity. All with the flexibility of a variable ratio, two-part, neutral-cure silicone.

APPLICATIONS

RTV 500-600 functions as an adhesive sealant that develops bonds to most substrates and commonly used accessories in industrial assembly. It allows for high unit throughput, low pumping viscosity on production equipment, and void-free filling of the sealant joint.

INSTALLATION

As with all two-component materials, work-life and cure times of RTV 500-600 are dependent upon environmental conditions such as temperature. The material should be continued to room temperature before use. Adhesion should be checked on small samples prior to full-scale production.

AVAILABILITY

RTV 500-600 is available in 55-gallon drums and in 5-gallon pails, and dual two-component 2:1 cartridge.

STORAGE

RTV 500-600 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, 75°F (24°C).

PRECAUTIONS

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

Silicone setting blocks are recommended for direct contact RTV 500-600. Avoid using non-silicone materials (i.e., EPDM, Neoprene) as they could degrade or discolor the product seal over time. Compatibility testing is recommended on all materials that are to be in direct contact with RTV 500-600. Do not use in or around highly oxidative chemicals such as liquid oxygen, chlorine, or peroxides.

LIMITATIONS

Not recommended for: Joints continuously submerged under water; areas needing paint or stain.

TYPICAL UNCURED PROPERTIES*

Physical Property	Test Method	Base (Part A)	Catalyst (Part B)
Appearance		Paste (Black)	Paste (White)
Viscosity (cPs)	Brookfield HB #6 @ 20 rpm	50,000 – 160,000	30,000 – 85,000

MIX RATIO BY WEIGHT*

Physical Property	Base to 1.0 gm Of Catalyst
Base Ratio by Volume	2:1
Base Weight (gm)	1.6:1

MIXED PROPERTIES*

Physical Property	Typical Value
Color	Black
Specific Gravity	1.4
Mixed Ratio	2:1
Snap Time Range	<10 minutes
Tack-Free Time	<10 minutes
Working Time	< 5 minutes
Skin Time Range	<10 minutes

TYPICAL CURED PROPERTIES (2:1 by volume) *

Physical Property	Test Method	Typical Value
Color		Black
Tensile Strength (psi)	ASTM D412	200 – 300
Elongation (%)	ASTM D412	300 – 400
Hardness (Shore A)	ASTM D2240	35 – 45
Slump	Boeing Jig ASTM D2202	<0.3"
Shear Strength (psi)		
Ceramic Glass to Stainless Steel		150 – 200
Ceramic Glass to Aluminum		150 – 250
Stainless Steel		150 – 200
Polyester Painted Aluminum		100 – 150
Ceramic Glass	ASTM D1002 @ 50% R.H. and 25°C	100 – 200
Ceramic Tile		150 – 250
Galvalume		150 – 250
Aluminum		175 – 225
Glass		125 – 175

CERTIFICATIONS

Certification	Test	Value
UL 746C, Polymeric Adhesive Systems, Electrical Equipment – Component	E534109	Pass
REACH		Compliant

*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 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.