

Industrial Adhesive 500-642

Technical Data Specification



DESCRIPTION

Industrial Adhesive 500-642 is a two-component, 100% silicone, neutral cure sealant that rapidly builds adhesive and elastomeric strength.

500-642 demonstrates outstanding long-term resistance to natural weathering including extreme temperatures, ultraviolet radiation, rain, and snow, with negligible change in elasticity. All with the simplicity of a 2:1 fixed ratio, two-part, neutral-cure silicone.

APPLICATIONS

Industrial Adhesive 500-642 functions as an adhesive sealant that develops bonds to most substrates. It allows for high unit throughput, low pumping viscosity on dispensing equipment, and void-free filling of the sealant joint.

INSTALLATION

As with all two component materials, the work life and cure times of Industrial Adhesive 500-642 are dependent upon environmental conditions such as temperature. Adhesion should be checked on small samples prior to full-scale production.

AVAILABILITY

Industrial Adhesive 500-642 is available in 55-gal drums.

STORAGE

Industrial Adhesive 500-642 has a shelf life of eighteen (18) months from the date of manufacture for Part A, and six (6) months for Part B, 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 S.D.S.

Compatibility testing is recommended on all materials that are to be in direct contact with Industrial Adhesive 500-642. 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.

PRODUCT SPECIFICATIONS (UNMIXED)*

Physical Property	Base (Part A)	Catalyst (Part B)
Appearance	Black	Off-white
Specific Gravity	1.40 – 1.45	1.67 – 1.72
Viscosity (Brookfield HB #6) (cPs)	150,000 – 400,000	35,000 – 100,000
Extrusion Rate (1/8" nozzle @ 90 psi)	>150 g/min	>1,000 g/min

PRODUCT SPECIFICATIONS (MIXED)*

Physical Property	Performance Range
Color	Black
Cure Chemistry	Alkoxy
Snap Time Range	5 – 10 minutes
Tack-Free Range	5 – 20 minutes

MIX RATIO*

Physical Property	Base to 1 gm of Catalyst
Base Ratio by Volume	2:1
Base Ratio by Weight (gm)	1.5:1

TYPICAL MIXED PROPERTIES*

Physical Property	Typical Value
Specific Gravity	1.48 – 1.52
Sag, Boeing Jig (ASTM D2202)	< 0.1"

TYPICAL CURED PROPERTIES (2:1 by volume) *

Physical Property	Test Method	Typical Value
Color		Black
Tensile Strength (psi)	ASTM D412	225
Elongation (%)	ASTM D412	300
Hardness (Shore A)	ASTM D2240	47
Adhesion	Novagard 70-L0-Pull Tab	>80 lbf >80 lbf
Shear Strength (psi)	ASTM D1002	
Stainless Steel		
Aluminum		
Aluminum Powder Coated		
Polycarbonate		
Acrylic		
PVC		
PET	191	
Nylon	170	
Listings/Specifications		GMW16232

*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.