

# 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 six (6) 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 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       |

### PRODUCT SPECIFICATIONS (MIXED)\*

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

### TYPICAL UNCURED PROPERTIES\*

| Physical Property                     | Base (Part A)     | Catalyst (Part B) |
|---------------------------------------|-------------------|-------------------|
| 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      |

### 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              | 175 – 275     |
| Elongation (%)          | ASTM D412              | 250 – 350     |
| Hardness (Shore A)      | ASTM D2240             | 45 – 50       |
| Adhesion                |                        |               |
| Chrome Plated Plastic   | Pull Tab Adhesion Test | >80 lbf       |
| Acrylic Coated Metal    |                        | >80 lbf       |
| 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.