

## TECHNICAL DATA SHEET SIA0015

25/02/2020

### **DESCRIPTION:**

*Tacusil*<sup>™</sup> SIA0015 is a two-part thermally conductivity silicone base potting material. It can completely cure at room temperature to a flexible polymer with very low hardness and stress in the curing process. It contains abrasive aluminum oxide filler which introduces wear considerations for wetted components and designed for the big volume potting and provides very good resistance to chemicals, solvent, acids and water etc.

#### **TYPICAL PROPERTIES:**

All properties given are at 25 °C unless otherwise noted.

| Property:                              | Value:                              | Test Method or Source:   |
|--|-------------------------------------|--|
| Color                                  | White                               | Visual   |
| Mix Ratio By Weight By Volume          | Part A to Part<br>1 to 1<br>1 to 1  |  |
| Cure Schedule                          | 24 hours @RT or<br>2 hours@80°C     |  |
| Viscosity: Part A Part B Mixed         | 5,000 cps<br>6,500 cps<br>5,500 cps | Rheometer parallel plate 25mm@1/s 45530006291                  |
| Specific Gravity Part A Part B Mixed   | 1.6<br>1.6<br>1.6                   | Calculated   |
| Pot Life                               | >120 mins                           | 453560822627   |
| Gel Time                               | 240 mins / 50cc sample              | 455300005390/Sunshine Gel Timer                                |
| Glass Transition Temperature/Tg        | -50 °C                              | 453560822409 by DSC  |
| Hardness                               | 15 Shore A                          | 455300006287/ASTM D2240  |
| Thermal Conductivity                   | 1.6 W/m.K                           | ASTM 5470D   |
| Tensile Properties Strength Elongation | 175 psi<br>250%                     | 455300006285/ASTM D638/ MTS<br>4535601224470/ASTM D638/Instron |
| Dielectric Constant @ 100 kHz          | 3.7                                 | Estimated  |
| Dielectric Strength                    | 460 V/mil                           | ASTM D149 Method A, immersed in ASTM D3487 Type II Oil         |
| Non-volatile content                   | 100%                                | 455300005646   |
| Temperature Range                      | -40~200 °C                          |  |

This TDS contains values that have been updated. The values reported in this technical data sheet are typical values of the product, and are highly dependent on test conditions and methodology. We actively seek the most precise and accurate ways to measure and interpret performance of our products, and to update estimated values with measured values. The formula has not been revised or changed in any way. Although the values on paper have changed, you can expect the same performance of the product.

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#### **INSTRUCTIONS:**

- Bulk format: weigh and mix parts A and B accurately and thoroughly, scraping sides of container often.
  Do not pour from mixing container, transfer to a new container as residual unmixed material may cause a
  tacky spot on the surface of the casting. Maintain adequate velocity during dispensing to ensure
  complete mixing.
- 2. Allow to cure undisturbed until product is fully gelled or tack-free to the touch.
- 3. Clean up uncured resin with suitable organic solvent such as MEK, acetone or other organic solvent.

**SHELF LIFE AND STORAGE:** 9 months at 25 °C in bulk package

Specialty packaging may be less.