

## Technical Data Sheet

### GENERAL DESCRIPTION

GSP 1603-5S is a two part polyurethane potting compound used for potting components. It provides between one to two hours of working time. This product is appropriate for large mass casting, with low exotherm and shrinkage.

Features are:

- Excellent adhesion
- Excellent hydrolytic stability
- Long open time
- Low shrinkage
- Provided in ratio packed kits

### COMPONENT PROPERTIES

Property	1603-5SA	1603-5SB
Shelf Life	6 months	12 months
Density (lb/gal)	9.8	12.9
Color	Amber	Black
Viscosity, cps	200	10,000

### HANDLING PROPERTIES

Property	1603-5S
Mix Ratio by Volume	31.5A:100B
Mix Ratio by Weight	24A : 100B
Gel Time	2 hours (100gram mass)
Cure Time	24 hours at room temp

### PHYSICAL PROPERTIES

Property	1603-3
Hardness	88 Shore A +/-5
Color	Black
Water Absorption at 24 hour exposure	<0.1%
Dielectric Strength (V/mil)	323 (ASTM D149-97a Method A)
Dielectric Constant (k)	3.83 (ASTM D150-98)
Volume Resistivity ( $\Omega \cdot \text{cm}$ )	4.932E+15 (ASTM D257-99)
Coefficient of Thermal Expansion (in/C)	.0012
Thermal Conductivity (cal/(sec)(sq cm)(C)(cm))	>= 14E+4
Temperature Range of Use (C)	-40 to +80

## **INSTRUCTIONS FOR USE**

**TO MIX BY HAND:** Proportion out components according to parts by weight or volume ratio into a non-reactive container (polyethylene, polypropylene, or metal de-rimmed can). Container should be about five times larger than the volume of the mixed material. Mix components very thoroughly, preferably with a metal spatula, scraping the sides and bottom of container to incorporate all material.

**Note:** During application, do not scrape sides or bottom of the container used for mixing. Residual amounts of poorly mixed material may be incorporated. Such material may fail to cure completely, and may not achieve full physical properties.

## **CURING INSTRUCTIONS**

### **Mix Ratio by Weight:**

Mix 24 parts **GSP 1603-5SA** to 100 parts **GSP 1603-5SB**.

**READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET (MSDS) PRIOR TO USING THIS PRODUCT.**

### **Notice to User:**

The following is made in lieu of all warranties, expressed or implied. Seller's and manufacturer's only obligation shall be to replace such quantity of product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use, and user assumes all risks and liability whatsoever in connection therewith. The foregoing may not be altered except by an agreement signed by officers/owners of G.S. Polymers, Inc.

**Prepared: 3/22/07 MPS**