

Technical Data Sheet

GENERAL DESCRIPTION

THERMALLY CONDUCTIVE EPOXY

GSP 1345 is a two-part, one to one mix ratio, thermally conductive epoxy. This easy to use ratio features virtually no settling of the fillers, and is available in cartridges. **GSP 1345** works well for potting components where heat transfer is required while preserving excellent adhesion and impact resistance as compared to other epoxy systems.

COMPONENT PROPERTIES

| Property | GSP 1345A | GSP 1345B |
|--------------------------------------|-----------|-----------|
| Shelf Life | 6 months | 6 months |
| Density (lb/gal) | 14.3 | 12.5 |
| Viscosity, RV spindle 7, 5 rpm (cps) | 72,000 | 108,000 |
| Color | Black | White |

HANDLING PROPERTIES

| Property | GSP 1345 |
|---------------------|---|
| Mix Ratio by Volume | 1A:1B |
| Pot Life | 1 hour |
| Gel Time | 60 min |
| Cure Time | 24 hours at room temp. 2 hours at 120 °F |

PHYSICAL PROPERTIES

| Property | GSP 1345 |
|---|------------------------------|
| Hardness (Shore D) | 80-85 |
| Color | Black |
| Temperature Range (F) | Remains hard up to 200F |
| Dielectric Strength (V/mil) | 414 (ASTM D149-97a Method A) |
| Dielectric Constant (k) | 3.23 (ASTM D150-98) |
| Volume Resistivity ($\Omega \cdot \text{cm}$) | 5.327E+15 (ASTM D257-99) |

INSTRUCTIONS FOR USE

The recommended method of application for this product is with prepackaged, side-by-side ratio tubes using a dispenser and a static mix nozzle. To ensure an accurate mix ratio when dispensing material through a static mixer, discard the first material extruded from the mixer to ensure accurate mix ratio. Static mixers and dispensers are available from GS Polymers. Contact the sales department for further information.

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. The mixed material should then be degassed under vacuum to ensure the final cured product does not contain air bubbles which would inhibit thermal conductivity.

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 one part of **GSP 1345 A** to one part of **GSP 1345B**.

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.

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