

## GSP 1541

### POLYURETHANE ADHESIVE FOR ABS, PVC AND POLYCARBONATE

#### Ultra-Fast Curing Thermoplastic Bonder

#### GENERAL DESCRIPTION

**GSP 1541** is high-strength, two-part, polyurethane adhesive system developed for bonding to thermoplastics. It provides exceptional adhesion to ABS, PVC and Polycarbonate plastics.

GSP 1541 dispenses as a thixotropic, non-sagging gel, that fixtures in minutes. The system cures at room temperature as a tough, semi-flexible elastomer, with excellent moisture resistance, impact resistance and adhesion.

This system is ideal in structural bonding applications requiring adhesion to ABS, PVC or Polycarbonate.

#### FEATURES

Contains no solvents; 100% reactive  
Exceptional ABS, PVC and Polycarbonate adhesion

Thixotropic, non-flow rheology  
Hydrophobic  
Resistant to foaming

#### COMPONENT PROPERTIES

PROPERTY	GSP 1541 PART A	GSP 1541 PART B
Shelf Life	6 months	6 months
Density (lb/gal)	9.95	8.90
Viscosity (cps)	2350	2000
Color	Natural	Black

#### HANDLING PROPERTIES

PROPERTY	GSP 1541
Mix Ratio by Weight	110.4 A : 100 B
Mix Ratio by Volume	100 A : 100 B
Pot Life	45 seconds
Gel Time	90 seconds
Cure Time	Overnight @ room temperature Full properties develop over 1 week's time

#### PHYSICAL PROPERTIES

PROPERTY	GSP 1541
Hardness, Shore D	45
Color	Black

## INSTRUCTIONS FOR USE

### TO MIX BY HAND:

This product is not designed to be mixed by hand due to the exceptionally fast gel time. It must be dispensed through a mix and meter machine or purchased in dual syringe cartridges (see next section).

### SIDE-BY-SIDE (SBS) CARTRIDGE:

The recommended method of application for this product is with prepackaged, side-by-side (SBS) ratio tubes using a dispenser and a static mix nozzle. To ensure an accurate mix ratio when dispensing material from a SBS tube through a static mixer nozzle, follow the steps below:

1. Remove the nozzle tip/cap. Do not discard tip/cap unless all the material in SBS tube is to be used.
2. Extrude enough material until there is an even flow of material from both openings. Discard this material.
3. Attach mix static nozzle. Extrude about ~2-3 cm (~1 inch) of material. Discard this initially extruded material. Cartridge pistons will now be precisely aligned and material on ratio.
4. Apply material from the cartridge directly to the work area.
5. To preserve leftover material in the SBS tube after application, remove and discard the static mix nozzle.
6. Clean the tip/cap thoroughly to prevent cross contamination of the tip openings.
7. Reinsert or reattach tip/cap back onto the SBS tube.

### CURING PROCEDURES:

System will appear fully cured after 8 – 12 hours (Overnight). Properties will continue to develop over a period of several days at ambient temperature. Cure may be accelerated with the application of heat. To heat cure the system, allow product to gel at room temperature for one hour. Then apply moderate heat 66-85 °C (150-180° F) for 1 to 3 hours.

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

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## NOTICE TO USER

The following is made in lieu of all warranties, expressed or implied. It is the customer's responsibility to determine fitness of use for all GSP products by directly testing the materials first-hand for each application. Please fully evaluate the materials so as to convince yourself of appropriate and adequate performance. Before using, customer shall determine the suitability of the product for the intended use, and customer assumes all risks and liability whatsoever in connection therewith.

The only obligation of the seller or manufacturer 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. The foregoing may not be altered except by an agreement signed by officers/owners of G.S. Polymers, Inc.

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