



# GSP 1500-4 POLYURETHANE ADHESIVE

#### Thixotropic, Adhesion to Wet Substrates, FDA Applications

#### **GENERAL DESCRIPTION**

**GSP 1500-4** is a cost-effective, two-part, modified polyurethane adhesive designed for bonding porous or wet substrates. The cured system provides excellent adhesion and resists degradation from water exposure. It offers a long open time and dispenses as a non-flowing bead that allows for direct application to vertical surfaces.

# **FEATURES**

Contains no solvents; 100% reactive Excellent adhesion and hydrolytic stability Thixotropic paste Resistant to <u>incidental</u> solvent exposure (Not designed for submersion in solvents) All components meet FDA 21 CFR 175.105

## **COMPONENT PROPERTIES**

PROPERTY	GSP 1500-4 PART A	GSP 1500-4 PART B
Shelf Life	6 months	6 months
Density (lb/gal)	10.03	8.38
Viscosity (cps)	Thixotropic Paste Thixotropic Paste	
Color	Off White – Light Yellow	White

#### HANDLING PROPERTIES

PROPERTY	GSP 1500-4
Mix Ratio by Weight	58 A : 100 B
Mix Ratio by Volume	50 A : 100 B
Pot Life	12 minutes
Gel Time	20 – 30 minutes
Cure Time	Overnight @ room temperature Hardness develops over 1 week's time

#### PHYSICAL PROPERTIES

PROPERTY	GSP 1500-4
Hardness	90 A
Color	Off-White
Mixed Density	8.7

## **INSTRUCTIONS FOR USE**

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

- 1. Remove the nozzle tip-cap by twisting and pulling it off. Do not discard tip cap unless all the material in SBS tube is used. Save for reattachment to seal remaining material in the SBS tube.
- 2. Extrude enough material until there is an even flow of material from both openings. Discard this material extruded from the SBS tube.
- 3. Attach the mix static nozzle by twisting it on the nozzle tip. Extrude material until ~2-3 cm (~1 inch) of material has extruded. Discard this material extruded from the mixer.
- 4. Material can now be applied directly to the bonding surface.
- 5. When application is complete and there is still material remaining in the SBS tube, remove and discard the static mix nozzle.
- 6. Clean the tip-cap thoroughly to prevent cross contamination of the tip openings.
- 7. Attach tip-cap back onto the SBS tube.

**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 mixed material. Mix components very thoroughly, preferably with a metal spatula, scraping the sides and bottom of the container to incorporate all material.

Remove the air entrapped during mixing by placing the container of mixed material into a vacuum chamber. Under vacuum, the level of mixed material will rise and then drop with strong, bubble-breaking action. Do not allow the contents to rise over the top of the container while removing the air. Allow the material to de-gas (de-air) until the liquid level drops and bubbling is minimal. At this point, release the vacuum. If working time allows, transfer material to a clean container, without scraping the sides or bottom, before applying. If working time does not allow transfer, material should be used immediately.

**Note:** During application, do not scrape the 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. Additionally, do not mix more than can be applied in ten minutes. The gel time is between ten and thirty minutes, but will vary depending on the mass mixed and ambient temperature.

#### 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. 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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