

## GSP 1790

### EPOXY ADHESIVE

Impact Resistant, Chemical Resistant, Heat Resistant

#### GENERAL DESCRIPTION

**GSP 1790** is a two-part epoxy adhesive system. When applied, the semi-thixotropic material forms a slow-flowing bead. The system provides 30–45 minutes of workable time prior to gel. The cured system offers excellent chemical, heat and impact resistance, and provides excellent adhesion to many substrates. It is particularly effective on metals and blasted stainless steel.

#### FEATURES

- Reinforced for impact and shock resistance
- Excellent chemical and heat resistance
- Excellent adhesion to metal and stainless steel
- 100% Reactive (Contains no solvents)
- 30 – 45 minute working time
- Heat Curable in 20 minutes @ 250°F

#### COMPONENT PROPERTIES

PROPERTY	GSP 1790 PART A	GSP 1790 PART B
Shelf Life	6 months	6 months
Density (lb/gal)	13.28	13.02
Viscosity (cps)	250000 (RV-7 @ 2rpm)	~40000 (LV-4 @ 10rpm)
Color	Off-White	Tan

#### HANDLING PROPERTIES

PROPERTY	GSP 1790
Mix Ratio by Volume	4 A : 1 B
Mix Ratio by Weight	100 A : 24 B
Pot Life	30 minutes
Gel Time	40 – 60 minutes
Cure Time	2 – 3 hours @ room temperature 20 minutes @ 250°F

#### PHYSICAL PROPERTIES

PROPERTY	GSP 1790
Hardness	90 Shore D
Color	Off-White

## INSTRUCTIONS FOR USE

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

The recommended method to ensure an accurate mix ratio when dispensing material from a SBS tube through a static mixer nozzle is as follows:

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:

**Mix Ratio by Volume:** 4 parts by volume GSP 1790 Part A to 1 part by volume GSP 1790 Part B.

**Mix Ratio by Weight:** 100 parts by weight GSP 1790 Part A to 24 parts by weight GSP 1790 Part B.

**Pot-Life:** Do not mix more than can be applied in 30 minutes. Gel time is about 45 - 60 minutes but will vary depending on the mass mixed and the ambient temperature.

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.

If working time allows, transfer material to a clean container without scraping sides or bottom before applying. Material should be used immediately.

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.

### 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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