

MMA 310 Technical Data Sheet (TDS)

Description of Infinity Bond MMA 310

Infinity Bond MMA 310 is a 1:1 medium setting Methacrylate adhesive great for bonding metals, engineered plastics and fiberglass. MMA 310 works with minimal surface preparation and has excellent shock and impact resistance. MMA 310 also provides a durable bond even when exposed to heavy thermal cycling and extreme temperature conditions.

Features of Infinity Bond MMA 310

- No Surface preparation required
- Excellent weathering properties
- Great shock and impact resistance
- Strong, structural bond
- 1:1 mix ratio - easy to dispense
- Excellent Thermal Cycling and Temperature Resistance

Properties of Infinity Bond MMA 310

Room Temperature Cure Properties

- Working Time 8 to 12 minutes (at 75°F/ 24°C)
- Fixture Time 18 to 25 minutes (at 75°F/ 24°C)
- Can be Moved In 30 to 45 minutes
- Operating Temp. 65°F to 85°F (18°C to 30°C)
- Gap Filling .375 inches
- Mixed Density 8.1 lbs/gal (.96 g/cc)
- Flash Point 51°F (11°C) – See SDS for more safety information

Uncured: Resin Activator

- Resin Viscosity (cps) 40,000 – 90,000
- Activator Viscosity (cps) 100,000 – 150,000
- Color Resin: Translucent Activator: Amber
- Density (lbs/gal) Resin: 8.2 Activator: 8.0
- Mix Ratio (wt or vol) Resin: 1.0 Activator: 1.0

MMA 310 Bonds To:

- Aluminum
- Steel
- Stainless Steel
- Coated Metals
- Fiberglass
- Phenolics
- Gel Coats
- Epoxy
- Rim Urethane
- Polyurethane
- Liquid Molding Resins
- Acrylics
- ABS
- Polycarbonate
- PPOs
- PVC
- Vinyl
- Polystyrene
- PBT Blends
- PET Blends

Tensile Strength (ASTM D638) Substrate Results Failure Type

- Strength, psi Fiberglass Surfaces 2,500+ Substrate
- Strength, psi ABS/PVC Sheeting 1,000+ Substrate
- Strength, psi Steel/Stainless Steel 2,500 – 3,500 Cohesive
- Strength, psi Aluminum 2,500 – 3,500 Cohesive

Application and Handling Guidelines

The product is best used at temperatures between 65 °F and 80 °F. Temperatures below 65 °F will slow the cure speed of the material and viscosities will be higher. Temperatures above 80 °F will cause the material to cure faster and viscosities will be lower. For consistent dispensing maintain temperature in the above mentioned range.

For optimum bond strength and to insure maximum performance in the finished assembly, join parts together within the specified work time of the adhesive. Make sure the bond joint has uniform coverage and that a sufficient amount of adhesive is in the bond area. It is important to have the adhesive applied, parts aligned and positioned, within the established work times for the product. To ensure maximum performance in the finished assembly parts should remain undisturbed until the fixture time is reached.

Clean up is best before the adhesive has cured. Cleaners containing acetone or Citrus terpene provide the best results. On cured adhesive repeat use may be required.

Precautions

Infinity Bond MMA 310 is flammable. Keep away from heat, spark, and open flames. KEEP OUT OF REACH OF CHILDREN. THE PRODUCT IS FOR INDUSTRIAL USE ONLY. Keep containers closed when not in use. Avoid contact with skin and eyes. Harmful if swallowed. Refer to Material Safety Data Sheet for complete safety information.

Storage and Shelf Life

The shelf life of the Infinity Bond MMA 310 is 12 months from date of shipment. Shelf life is based on the products being stored properly at temperatures between 55 °F and 75 °F. Exposure to temperatures above 75 °F will reduce the shelf life of these materials. These products should NEVER BE FROZEN.

Note

This data is furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is recommended that the product be tested in the application for which it is to be used.