

Infinity Bond MMA 500 Technical Data Sheet

Infinity Bond MMA 500 Low Surface Energy Plastic Adhesive

Infinity Bond MMA 500 is a 2-part methacrylate-based adhesive that is specially formulated to bond low surface energy materials such as a polypropylene and polyethylene without additional surface preparation. The MMA 500 offers increased working time combined with rapid strength build up. The MMA 500 material offers high impact resistance and is capable of withstanding extreme temperature fluctuations.

KEY PRODUCT FEATURES

- No Surface Preparation Required
- Excellent Strength
- Impact Resistant
- 100% Reactive
- Room Temperature Cure
- Easily Applied

PHYSICAL PROPERTIES

Uncured

Viscosity 25°C (cps):

Resin75,000-125,000

Activator 35,000-65,000

ColorNatural/Off-White

Specific Gravity 1.06

Mix Ratio:

By Volume1 to 1

By Weight1 to 1

Cured

Work Time, Minutes4-5 minutes

Gap Fill, Inches0.1

Temperature Range-60F - +250F

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.

TENSILE SHEAR STRENGTH

24hr RT Tensile Shear (psi)

| Substrate | MMA 500 | Competitor 1 | Competitor 2 |
|---------------|---------|--------------|--------------|
| Polypropylene | 1391 | 581 | 954 |
| HDPE | 1122 | 446 | 880 |

MMA 500 BONDS TO

- Polyethylene
- Polypropylene
- Aluminum
- Steel
- Coated Metals
- Fiberglass
- Polyurethane
- Liquid Molding Resins
- Acrylics
- ABS
- Polycarbonate
- PVC
- Vinyl's
- Polystyrenes
- PTFE
- PFOA
- Glass
- Zeolites

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PRECAUTIONS

Infinity Bond MMA 500 is flammable in the uncured state. 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 500 is 6 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.