



MP55420

MP55420 is a high performance two part methacrylate adhesive engineered to bond a wide range of plastics, metals, and composite assemblies. It offers outstanding bond strength, is extremely durable, with excellent impact and weathering properties. MP55420 greatly increases the reliability of finished assemblies with exceptional flexibility, it's ability to with stand extreme temperature fluctuation and thermal cycling, and resistance to a wide range of chemicals and environmental conditions.

| | |
|--------------------|-----------------------|
| Technology / Base | Modified Acrylic |
| Type of Product | Structural Adhesive |
| Components | Two component |
| Curing | Room Temperature Cure |
| Appearance / Color | Off White or Amber |
| Consistency | Viscous Liquid |

Features and Benefits

- No Surface Preparation Required
- Excellent Adhesion Properties
- Excellent Strength to Metals, E-Coat, Thermoplastics, Thermosets, and Engineering Plastics
- Excellent Impact Resistance
- Suitable for Easy Manual and Pneumatic Dispensing
- Excellent Thermal Performance
- 100% Reactive
- Room Temperature Cure
- 10:1 meter-mix product for ease of application
- Use on as received metal surfaces including aluminum, stainless and plated steels and forms tough, high strength bonds without surface preparation

Technical Data

| | | Condition/Method |
|---|---------------------------------|-------------------------|
| Rheology | | |
| Viscosity - Resin | 130,000 cPs @ 25°C | Brookfield RV7 20 rpm |
| Viscosity - Activator | 50,000 cPs @ 25°C | Brookfield RV7 20 rpm |
| Viscosity - Mixed | | |
| Thixotropic Index | 5 | Brookfield RV7 20/2 rpm |
| Density | | |
| Mixed Density | 0.95 g/cc | |
| Mix Ratio | | |
| Volume Mix Ratio | 10:1 | |
| Weight Mix Ratio | 10:1 | |
| Uncured Material Characteristics | | |
| Flash Point | 51°F | |
| Open Time | 4 - 6 minutes | |
| Fixture Time | 8 - 13 minutes | |
| Cure Temperature and Time | Room Temperature, 24 hr | |
| Cured Mechanical Properties | | |
| Gap Fill Dimension | 0.25 inch | |
| Hardness | 45 Shore D | ASTM D2240 |
| Tensile Strength | 3190 to 4640 psi (22 to 32 MPa) | ASTM D638 |
| Over Lap Shear Strength | | |
| Carbon Steel | 3100 to 3900 psi (21 to 27 MPa) | ASTM D1002, 25°C 50% RH |
| Aluminum | 3300 psi | ASTM D1002, 25°C 50% RH |
| Cured Thermal Properties | | |
| Thermal Service Range | -67°F to 250°F | |



Recommended For

METALS

- Aluminum
- Steel
- Stainless
- E-Coated Metal

THERMOSETS

- Fiberglass
- Phenolic
- Gel Coat
- Epoxy
- RIM Urethane
- Polyurethane
- Liquid Molding Resin

THERMOPLASTICS

- Acrylic
- ABS
- Polycarbonate
- Nylon/PA
- PPO
- Vinyl
- PVC
- Styrene
- Peek
- PBT Blends
- PET Blends

Handling and Clean-Up

Clean up is best before the adhesive has cured. Cleaners containing NMP (N-methyl pyrrolidone) or Citrus terpene provide the best results. On cured adhesive repeat use may be required.

Storage and Shelf Life

Product should be stored in a cool dry place out of direct sunlight. The shelf life of MP55420 is one year from date of manufacture. 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. This product should NEVER BE FROZEN.

General Instructions

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 mate 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.

Typical Packaging

The MP 55420 Series is conveniently packaged in 50 ml, 380 ml, 490 ml, pail, and drum kits. Special packaging is available upon request.

Safety and Disposal

For safe handling information on this product, consult the Safety Data Sheet (SDS)

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