



ENGINEERING ADHESIVES & SEALANTS

MEGACRYL™ S-142 is a two-part methyl methacrylate adhesive designed for structural bonding of engineered thermoplastics, metal and composite assemblies. Combined at a 10:1 ratio, thixotropic non-sagging formulation. This adhesive combines high strength and durability with the ability to adhere to a wide range of substrates with a minimum of surface preparation. Used in Automotive, Marine, Electronics, Plastic Fabrication, Signs, Metal Fabrications etc.

| Monomer Form (Liquid) | |
|-------------------------------|----------------------------------|
| Base Resin | Modified Acrylic |
| Colour | Milky White (A) Off White (B) |
| Viscosity (Adhesive - Part A) | 130,000 mPa·s |
| Viscosity (Hardener - Part B) | 50,000 mPa·s |
| Flash Point | Approx. 10°C (51F) |
| Shelf Life @ 20°C | 12 months unopened |
| Toxicity | Low to moderate (see SDS) |
| Mix Ratio | 10:1 |
| Working Time | 4-6 minutes |
| Fixture Time | 8-13 minutes |
| Full Cure | 24 hours |
| RoHS Compliant? | Yes |

| Polymer Form (Solid) | |
|--|------------------------------------|
| Tensile Strength acc. to <i>ASTM D638</i> | 22-32 MPa (3190 to 4640psi) |
| Over Lap Shear Strength acc. to <i>ASTM D1002</i> | |
| <ul style="list-style-type: none"> Carbon Steel | 21 to 27 MPa (3100 to 3900 psi) |
| <ul style="list-style-type: none"> Aluminium | 23 MPa (3300 psi) |
| Hardness acc. to <i>ASTM D2240</i> | 45 Shore D |
| Gap Fill | 6.35mm (0.250") |
| Service Temperature | -40°C / +121°C |
| Elongation | 30 - 50% |

Features and Benefits

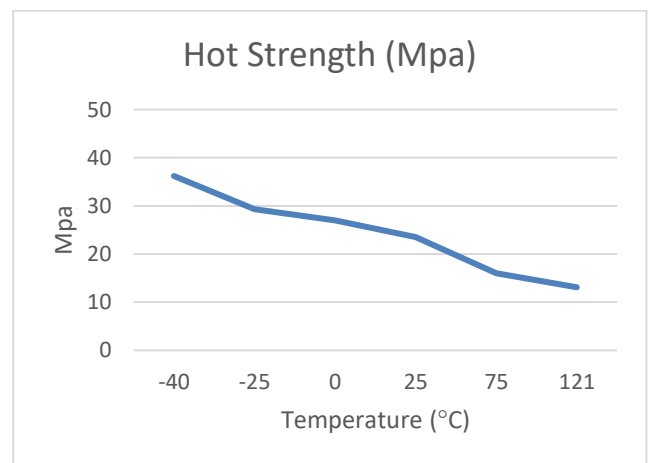
- No Surface Preparation Required.
- Excellent Adhesion Properties.
- Excellent Strength to Metals, E-Coat, Thermoplastics, Thermosets and Engineering Plastics.
- Resistance to Wide Range of Chemicals.
- High Impact Resistance.
- 100% Reactive.
- Room Temperature Cure.
- Use on as received metal surfaces including aluminium, stainless and plated steels and forms tough, high strength bonds.

MEGACRYL™ S-142 STRUCTURAL ADHESIVE TECHNICAL DATA SHEET



Part # S142490

Temperature Resistance



Lap Shear Strength ASTM D 1002
304 Steel / 304 Steel

General Instructions

MEGACRYL™ S-142 is a 10:1 meter-mix product for ease of application. Because of its excellent adhesion properties it can be used on as received metal surfaces including aluminium, stainless and plated steels and forms tough, high strength bonds without surface preparation.

Curing

Curing commences upon mixing of Part A and Part B. Working time is the approximate time after mixing that adhesive remains liquid and usable. Fixture time is the time after which parts may be moved and/or unclamped. 80% of final strength develops within 1 hour.

Recommended For

METALS

- Aluminium
- Steel
- Stainless
- E-Coated Metal

THERMOSETS

- Fibreglass
- Phenolic
- Gel Coat
- Epoxy
- RIM Urethane
- Polyurethane
- Liquid Moulding Resin

THERMOPLASTICS

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

Storage

Product should be stored in a cool dry place out of direct sunlight. Shelf life is dependent on the product being stored properly at temperatures between 15 to 25°C. The shelf life is twelve (12) months in original sealed containers. Shelf life can be extended by refrigeration. **Do NOT freeze.**

Safety and Disposal

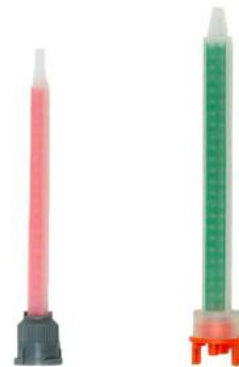
For safe handling information on this product, consult safety Data Sheet (SDS). Disposal should be in accordance with local and/or national regulations.

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.

Compatible Components

| Static Mixing Nozzles | Part Number |
|-------------------------|-------------|
| 50ml 10:1 Static Mixer | MXB050-10 |
| 490ml 10:1 Static Mixer | MXB490-10 |



MXB050-10
(50ml)

MXB490-10
(490ml)

| Dispensing Guns | Part Number |
|----------------------|-------------|
| 50ml 10:1 Dispenser | DG050-10 |
| 490ml 10:1 Dispenser | DG490-10 |



Part # DG050-10
(50ml)



Part # DG490-10
(490ml)

Packaging

| Size | Part Number |
|----------------------|-------------|
| 490ml Dual Cartridge | S142490 |

Note

The data contained herein is offered in good faith based upon information that is believed to be accurate and reliable, but no warranty, express or implied, regarding the accuracy of such information is made. The conditions or methods of handling, storage, use and disposal of this product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product. It is the responsibility of the user to determine the products suitability for their intended purpose.

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