

#### **Technical Datasheet M120**

### **Product Description**

Bondchem M120 is a two component transparent structural methacylate adhesive, designed for the bonding of high strength plastic and composite applications. This grade is an advanced liquid composite which combines shock resistance and toughness from a unique blend of hybrid rubbers with a high tensile shear strength from an innovative liquid plastic resin. Once bonded this fusion of chemistries achieves an ultra high strength UV stable bond with excellent chemical and environmental resistance.

### **Typical Applications**

Bondchem M120 is very versatile, and can bond a wide variety of substrates to plastic without the need for surface primers or conditioners. Typical examples shown below:

- Bonding polycarbonate letters in the sign industry.
- Bonding perspex in POS manufacture.
- Repairing polycarbonate headlights.

- Bonding outdoor lighting lenses and fixtures.
  - Assembling electric meter houses and covers.

#### **Instructions For Use**

- 1. Always consult MSDS before using M120 for the first time.
- 2. Carry out surface preparation where required. \*
- 3. Remove cap, and attach mixer nozzle.
- 4. Dispense sufficient adhesive to ensure equal mix.
- Apply adhesive to one surface and assemble components carefully, clamping if required.
- It is always easier to remove any excess adhesive prior to cure using a suitable cleaner \*
- Allow the adhesive sufficient time to achieve handling strength before moving or unclamping components.
- 8. Once product has fully cured, polish any adhesive outside of the bondline with a soft cloth to achieve a deep shine.

## **Properties of Uncured Material**

| Resin                      | Methyl Methacrylate |
|----------------------------|---------------------|
| Colour                     | Clear               |
| Appearance                 | Transparent Liquid  |
| Viscosity Brookfield T Bar | 6,000cps            |
| Cure System                | Exothermic          |
| Open Time                  | 2-3 Minutes @ 20°C  |
| Handling Strength          | 5-7 Minutes @ 20°C  |

#### **Performance of Cured Material**

| ASTM D1002 Lapshear | Acrylic Plastic 8.2 Nmm2 ** |
|---------------------|-----------------------------|
| ASTM D1002 Lapshear | Polycarbonate 12.5 Nmm2 **  |
| Gap Fill            | 2mm                         |
| Temperature Range   | -55°C to 125°C              |

### **Packaging**

Bondchem M120 is available in 25ml, 50ml and 400ml Nylon cartridges for use with a dispensing gun.

## Storage & Shelflife

Bondchem M120 should be stored unopened in a cool dry location, out of direct sunlight. Stored correctly, this grade can offer a 12 month shelf life from manufacture.

# Health and Safety in Use

Bondchem M120 is a methyl methacrylate and should not be used without consulting the MSDS, which contains full information regarding the use of this product, including Transport, Disposal, Toxicological, Exposure Controls, Accidental Release and First Aid measures essential to the safe use of this product.

