

Product Description

Bondchem M480 is a two component structural methacrylate adhesive, designed for the bonding of high strength metal and composite applications. **M480** has been formulated from innovative 6th generation technology, incorporating the latest 8 co-polymer cure system. This unique system enables the **M480** to achieve the ultimate balance of mechanical strength and impact resistance whilst still remaining both simple and quick to use.

Typical Applications

Bondchem M480 is very versatile, and can bond a wide variety of substrates without the need for surface primers or conditioners. Typical examples shown below:

- Bonding metal fasteners to molded composite parts
- Bonding aluminium and stainless steel lettering in the sign manufacturing industry.
- Bonding automotive carbon fibre body panels
- Bonding GRP in the marine industry
- Bonding dissimilar metals for trailer fabrication

Instructions For Use

1. Always consult MSDS before using **M480** 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.
5. Apply adhesive to one surface and assemble components carefully, clamping if required.
6. It is always easier to remove any excess adhesive prior to cure using a suitable cleaner *
7. Allow the adhesive sufficient time to achieve handling strength before moving or unclamping components.

Properties of Uncured Material

Resin	Methyl Methacrylate
Colour	Amber/White
Appearance	Liquid
Brookfield Sp C @ 2.5rpm	5,000 to 10,000cps
Cure System	Exothermic
Open Time	2 to 4 Minutes @20°C
Handling Strength 10g Mass	4 to 6 Minutes@ 20°C

Performance of Cured Material

Gap Fill	1 mm
Temperature Range	-55 to 1200°C
ASTM D1002	
Mild Steel	Up to 28 Nmm ²
Stainless Steel	Up to 26 Nmm ²
Aluminum	Up to 22 Nmm ²
Stainless Steel	Up to 26 Nmm ²
PET G	Substrate Failure
HIPS	Substrate Failure
Acrylic	Substrate Failure
Polycarbonate	Substrate Failure
Shore D Hardness	75
Elongation at break (ISO 527 1A)	130 %
Tensile Strength at break (ISO 527 1A)	15 Nmm ²

Compatible Substrates

Aluminum	Wood
Stainless Steel	Granite
Mild Steel	Marble
UPVC	Urethanes
Polyesters	Vinyl Esters
ABS	Glav/Zinc Coated (With Primer)
Acrylic	Thermoset Plastics
FRP	Gelcoats
GRP	Epoxy laminate

Packaging

Bondchem M480 is available in 50ml and 400ml Nylon cartridges for use with a dispensing gun.

Storage & Shelflife

Bondchem M480 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 M480 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.