



HOLDIT®

**Technical Datasheet
HOLDIT M5020**

Revised Date: June 2011

Description

HOLDIT M5020 is a two component structural methacrylate adhesive. M5020 has been designed for the bonding of high strength metal and composite applications. M5020 has been formulated from innovative technology, including our revolutionary adhesion system. This unique system enables the M5020 to achieve the ultimate balance of mechanical strength and impact resistance whilst still remaining both simple and quick to use. M5020 also resists most fuels, lubricants, cleaning chemicals and fluids.

Applications

HOLDIT M5020 is very versatile, and can bond a wide variety of substrates without the need for surface primers or conditioners.

Examples:

- Bonding metal fasteners to moulded 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 the MSDS before using M5020 for the first time.
2. Prepare the surface where required removing oxides and scale.
3. Remove cap and attach the mixer nozzle.
4. Dispense sufficient adhesive to ensure equal mix.
5. Apply adhesive to one surface and assemble components carefully, clamping if required.
6. 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

Properties of Uncured Material.

Resin	Methyl Methacrylate
Colour	Yellow/White
Appearance	Thixotropic Gel
Viscosity Brookfield T Bar	120,000 to 150,000 cps
Cure System	Exothermic
Open Time	7 minutes @ 20°C
Handling Strength	12 minutes @ 20°C

Performance of Cured Material

ASTM D1002 Lapshear	Up to 30 Nmm ²
ASTM D638 Tensile Strength	Up to 30 Nmm ²
Gap Fill	4mm
Hardness	75 Shore D
Temperature Range	-55°C to 120°C

ACTIVE & INACTIVE METAL TABLE

Super Active Very Fast Cure	Active Fast Cure	Inactive Slow Cure	Passive Primer Necessary
Brass, Copper, Magnesium	Iron, Steel, Nickel, Aluminium	Stainless Steel, Titanium, Zinc, Anodized Aluminium, Galvanised Steel	Ceramics, Glass, Plastics, Painted Finishes



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Storage

HOLDIT M5020 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.

Presentation

HOLDIT M5020 is available in 25mls syringe and 50mls and 400mls nylon cartridges for use with a dispensing gun.

Conversions

- $(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
- $\text{N/mm} \times 5.71 = \text{lb/in}$
- $\text{MPa} \times 145 = \text{psi}$
- $\text{N/mm}^2 \times 145 = \text{psi}$
- $\text{N} \times 0.225 = \text{lb}$
- $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
- $\text{N}\cdot\text{mm} \times 0.738 = \text{lb}\cdot\text{ft}$
- $\text{mPa}\cdot\text{s} = \text{cP}$

Health & Safety in Use

HOLDIT M5020 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, Toxicology, Exposure Controls, Accidental Release and First Aid measures essential for the safe use of this product.

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