

MC1500 Superglue



Description

MC1500 from Multicomp is a general purpose, high viscosity instant adhesive suitable for bonding a wide variety of materials. This versatile adhesive bonds in seconds and is ideal for applications where a fast cure speed is required. MC1500 is formulated to give superior bonds on common substrates and will also work on acidic and porous substrates where other cyanoacrylate adhesives fail to bond. MC1500 has good gap filling capacity.

Properties of Material

| Properties | Value | Unit |
|--------------------|---------------------|----------------------------------|
| Chemical type | Ethyl | |
| Appearance | Clear Liquid | |
| Specific Gravity | 1.1 | |
| Viscosity* | 1275 - 1650 1500 | (Range) cPs Typical Value cPs |
| Tensile Strength** | 21 | N/mm ² |
| Fixture Time | 5 - 60 | Secs. |
| Full Cure @ 20°C | 24 | Hours |
| Max. Gap Fill | 0.2 | mm |
| Flash Point | >85 | °C |
| Shelf Life @ 5°C | 12 | Months |
| Temperature Range | -50 to +80 | °C |

* Brookfield LVF, spindle 3, 30rpm

** ISO 6922 (Typical Value)

Typical Curing Performance

| Substrate | Cure Time (Seconds) |
|-------------------------|---------------------|
| Steel/steel (degreased) | <60 |
| ABS/ABS | <20 |
| Rubber/Rubber | <15 |
| Wood (Balsa) | <3 |

Strength Development

After 2 minutes on steel: ~50% of final strength

Cure Speed Vs. Environmental Conditions

Cyanoacrylate adhesives require surface moisture on the substrates in order to initiate the curing mechanism. The speed of cure is reduced in low humidity conditions. Low temperatures will also reduce cure speed. All figures relating to cure speed are tested at 21°C.

Cure Speed Vs. Bond Gap

Multicomp cyanoacrylates give best results on close fitting parts. The product should be applied in a very thin line in order to ensure rapid polymerisation and a strong bond. Excessive bond gaps will result in slower cure speeds.

Chemical / Solvent Resistance

Multicomp cyanoacrylates exhibit excellent chemical resistance to most oils and solvents including motor oil, leaded petrol, ethanol, propanol and freon. Cyanoacrylates are not resistant to high levels of moisture or humidity over time.

Typical Environmental Resistance

Hot Strength

Multicomp cyanoacrylate adhesives are suitable for use at temperatures up to 80°C. At 80°C the bond will be approximately 70% of the strength at 21°C. The bond strength at 100°C is approximately 50% of full strength at 21°C.

Heat Ageing

Multicomp cyanoacrylates retain over 90% of their strength when heated to 80°C for 90 days and then tested at 21°C. Heating the bond to 100°C and then testing at 21°C gives bond strength of approximately 50% of initial strength.

Storage

Store in a cool area out of direct sunlight. Refrigeration to 5° C gives optimum storage stability.

Part Number Table

| Description | Part Number |
|---------------------|-------------|
| 5g MC1500 Superglue | MC001790 |

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell Limited 2016.