

# MC100 Superglue





## **Description**

MC100 from Multicomp is a general purpose, medium 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. MC100 works best on smooth, even surfaces with minimal gaps.

### **Properties of Material**

Properties	Value	Unit
Chemical type	Modified Ethyl	
Appearance	Clear Liquid	
Specific Gravity	1.06	
Viscosity*	80 - 120 100	(Range) cPs Typical Value cPs
Tensile Strength**	21	N/mm <sup>2</sup>
Fixture Time	3 - 60	Secs.
Full Cure @ 20°C	24	Hours
Max. Gap Fill	0.15	mm
Flash Point	>85	°C
Shelf Life @ 5°C	12	Months
Temperature Range	-50 to +80	°C

<sup>\*</sup> Cone and Plate Rheometer, controlled stress

### **Typical Curing Performance**

Substrate	Cure Time (Seconds)
Steel/steel (degreased)	<20
ABS/ABS	<10
Rubber/Rubber	<5
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.





<sup>\*\*</sup> ISO 6922



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#### 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
3g MC90K Superglue	MC001787



