



ENGLISH

Datasheet

# RS Pro Black Superglue

RS Stock No: 918-6885



918-6885 is a medium viscosity, black rubber-toughened cyanoacrylate adhesive. The superglue displays excellent peel and impact strength and is well suited to applications involving vibration, thermal shock, temperature cycling and high humidity.

## Typical Applications

918-6885 is specially formulated to provide a more flexible bond than standard cyanoacrylates. CT-300B can be used up to 105°C and has intermittent temperature resistance up to 125°C. 918-6885 can be used to bond a wide variety of substrates including metals, plastics, rubbers, etc. It can be used on PCB's to provide strain relief on components.

## Properties of Material

	Value
Chemical type	Modified Ethyl
Appearance	Black Liquid
Specific Gravity	1.10
Viscosity <sup>1</sup> cPs	300 – 1000
Typical Value cPs	600
Tensile Strength <sup>2</sup> N/mm <sup>2</sup>	21
Fixture Time Secs	5 - 50
Full Cure	(Hrs) 24
Max Gap Fill	(mm)0.20
Shelf Life @ 5°C	(Months) 6
Temperature Range °C	Continuous -50 to +105 Intermittent -50 to +125
Flash Point °C	>85

1 Brookfield LVF, spindle 3, speed 30 rpm  
2 <sup>2</sup> ISO 6922

## Curing Performance

Typical Speed:

Steel/steel	<50 seconds
ABS/ABS	<30 seconds
Rubber/rubber	<20 seconds

## 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

918-6885 gives 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.

## **Environmental Resistance**

### **Hot strength**

RS Pro 918-6885 cyanoacrylate adhesives are suitable for use at temperatures up to 105°C continuously, intermittently up to 125°C. At 105°C the bond will be approximately 40% of the strength at 21°C.

### **Heat Ageing**

RS Pro cyanoacrylates retain over 90% of their strength when heated to 100°C for 90 days and then tested at 21°C. Heating the bond to 120°C and then testing at 21°C gives bond strength of approximately 50% of initial strength.

### **Chemical/Solvent Resistance**

RS Pro 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.

### **Storage**

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

### **Directions for use**

Bond speed is very fast so ensure that parts are properly aligned before bonding. Activators may be required if there are gaps or porous surfaces. Some plastics may require application of a primer. Ensure parts are clean, dry and free from oil and grease. Product is normally hand applied from the bottle. Apply sparingly to one surface and press parts firmly together until handling strength is achieved. As a general rule, as little cyanoacrylate as possible should be used – over application will result in slow cure speed and lower bond strength.

Please contact your RS Pro representative for further advice on dispensing solutions.