



ENGLISH

Datasheet

RS Pro Multi-Surface Adhesive

RS Stock No: 918-6875



918-6875 is a medium viscosity modified Ethyl Cyanoacrylate adhesive. The superglue is suitable for bonding a very wide range of materials, including some porous ones, where a fast cure speed is required.

Typical Applications

918-6875 is specially formulated to give superior bonds on common substrates. It work on acidic and porous substrates where other cyanoacrylates fail to bond. Will bond, wood, cork, leather, cardboard and similar surfaces. 918-6875 relies less on surface moisture for cure speed than standard cyanoacrylates.

Recommended for use on lose-fitting parts and fairly smooth, even surfaces.

Properties of Material

	Value
Chemical type	Modified Ethyl
Appearance	Clear Liquid
Specific Gravity	1.06
Viscosity ¹ cPs	(Range)80 - 120 (Typical Value) 100
Tensile Strength ² N/mm ²	21
Fixture Time Secs	3 - 20
Full Cure @20°C	(Hrs) 24
Max Gap Fill	(mm)0.20
Shelf Life @ 5°C	(Months) 12
Temp Range °C	-50 to +80
Flash Point °C	>85

¹ Cone and Plate Rheometer, controlled stress

² ISO 6922

Typical Curing Performance

Substrate	Cure Time (seconds)
Steel/steel	<20
ABS/ABS	<10
Rubber/Rubber	<5
Wood (Balsa)	<3

Cure Speed vs Substrate

The speed of cure of cyanoacrylates varies according to the substrates to be bonded. Acidic surfaces such as paper and leather will have longer cure times than most plastics and rubbers. Some plastics with very low surface energies, such as polyethylene, polypropylene and Teflon[®] require the use of a primer

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

RS Pro 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

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.

Typical Environmental Resistance

Hot Strength

918-6878 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

RS Pro 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.

Removal of Cure Cyanoacrylate

Cured cyanoacrylate may be removed from most substrates, and parts disassembled, with a De-bonder. It is not possible to fully remove cyanoacrylate from fabrics.

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.