



## KROXX 301

TECHNICAL

### 1. PRODUCT DESCRIPTION

Kroxx 301 is a medium to low viscosity cyanoacrylate that is used for bonding applications, but is ideally suit for bonding plastic and to themselves or various combinations.

### 2. TYPICAL APPLICATIONS

Recommended for use on wood trim on furniture, balsa wood bonding for hobbyists, leather accessories on shoes, fabric bows on shoes and lampshade bonding. Other features include versatile bonding of most elastomers, metals and plastics.

### 3. PROPERTIES OF UNCURED MATERIAL

	Value
Chemical type	Ethyl
Appearance	Clear
Specific Gravity	1.06
Viscosity cPs	
– range	80~120
– typical value	100
Tensile Strength	(N/mm <sup>2</sup> ) 20
Fixture Time	(secs)10-30
Full Cure	(hours) 24
Flash Point	( °C ) > 85
Shelf Life @ 5 C	(months)12
Max Gap Fill	(mm)0.15
Operating Temperature Range	( °C ) -50 to +80

### 4. TYPICAL CURING PERFORMANCE

Typical Speed:	
Leather	2-20 seconds
Paper	2-10 seconds
ABS/ABS	2-7 seconds
Rubber/Rubber	1-5 seconds
Steel/steel	5-20 seconds

### 5. 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 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.

### 6. STORAGE

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

### 7. CURE SPEED VS. BOND GAP

Kroxx superglues 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. Cyanoacrylate Activators may be used to greatly increase cure speeds

### 8. CURE SPEED VS. ENVIRONMENTAL CONDITIONS

Kroxx superglues 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.

### 9. TYPICAL ENVIRONMENTAL RESISTANCE

#### Hot strength

Kroxx superglues 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

Kroxx superglues 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.

#### Chemical / Solvent Resistance

Kroxx superglues 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.

### 10. DATA RANGES

The data contained in this data sheet may be reported as typical value and/or range. Values are based on actual test data and are verified on a regular basis.

#### NOTES

The information contained herein is produced in good faith and is believed to be reliable but is for guidance only. Kroxx Inc. and its agents cannot assume liability or responsibility for results obtained in the use of its product by persons whose methods are outside or beyond our control. It is the user's responsibility to determine the suitability of any of the products and methods of use or preparation prior to use mentioned in our literature and furthermore the user's responsibility to observe and adapt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products.