

## Technical Data Sheet

# KB304

## Cyanoacrylate Instant Adhesive

### Description

KB304 is a low viscosity, modified ethyl cyanoacrylate instant adhesive, designed to give enhanced bonding on metallic substrates but will also give high strength bonds on plastics, rubbers, ceramics and other common substrates.

Cure times vary according to the materials being bonded, but most combinations are very fast-fixing in 3-25 seconds.

The one component nature of Krylex KB304 lends itself to easy automation of dispensing on production lines.

### Applications

Typical applications for KB304 are: bonding metal to metal or to other substrates, general bonding and repair, product assembly and manufacturing. Ideal for bonding grit blasted steel, etched aluminum and zinc dichromate.

KB304 is suitable for use on close-fitting parts and smooth, even surfaces.

Instant adhesives are also widely used in the electronics, automotive and white goods industries.

### Technical Features

Resin:	Modified Ethyl Cyanoacrylate
Appearance:	Clear
State:	Liquid
Cure Speed with Activator:	<3 seconds
Cure Speed w/o Activator:	3 - 25 seconds
Viscosity <sup>1</sup> :	34 - 44 cPs
Gap Fill:	0.10mm
Flash Point:	>85°C
Specific Gravity:	1.06
Max. Operating Temp:	-50°C to +80°C
Shelf Life @ 5°C:	12 Months

<sup>1</sup> Cone and plate rheometer, controlled stress

### Cured Performance

Full Cure Time:	24 Hrs @ 21°C
Tensile Shear Strength:	21 N/mm <sup>2</sup>
<sup>2</sup> ISO 6922	

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

### Fixture Times

Steel / Steel:	<25 seconds
ABS / ABS:	<10 seconds
Rubber / Rubber	<10 seconds
Wood (Balsa)	<3 seconds

### Factors Affecting Cure Speed

Cyanoacrylate adhesives cure when confined between close-fitting parts and in the presence of surface moisture on substrates.

Cure speed can be negatively influenced by very large gaps, low temperatures or low humidity environments.

Chemence recommends testing the suitability of Krylex products for any specific application.

### Use Of Accelerators/Primer

Krylex activators can be used to accelerate the curing speed or for priming absorbent surfaces. Activators may also be used for fillet cure and curing adhesive outside the bond line.

The use of an activator can reduce bond strength.

Krylex KP707 primer may be used for "difficult to bond" low surface energy plastic substrates.



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### Product Safety

Cyanoacrylate bonds skin and eyes in seconds.

If accidental skin bonding occurs, wash with warm soapy water and pry skin apart using a blunt instrument (such as a teaspoon handle).

In case of eye contact, bathe immediately with water and seek medical attention.

Skin contact through clothing may cause burns due to an exothermic reaction.

### Instructions for Use

Ensure parts are clean, dry and free from oil and grease.

Apply approximately one drop of adhesive to 25mm<sup>2</sup> of bond area. Krylex KB304 performs best with minimal gaps between substrates.

Hold parts together firmly until handling strength is achieved.

Product is normally hand applied from the bottle.

KB304 is suitable for use with dispensing systems for high volume assembly applications.

### Storage

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

### General Information

For safe handling of this product consult the Safety Data Sheet.

### Presentation

Bottles: .....20g, 50g & 500g

### Notes

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.

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