

## Technical Data Sheet

# KB604

## Low Odour Cyanoacrylate Instant Adhesive

### Description

KB604 is a low-medium viscosity, low odour, low bloom cyanoacrylate instant adhesive.

KB604 general purpose instant adhesive is designed to bond to a variety of materials including: most plastics, rubbers, metals, and other common substrates.

KB604 is an alkoxy-alkyl cyanoacrylate formulated for cosmetically critical applications, virtually eliminating the chlorosis (whitening / frosting) effect which can occur in some bonding situations.

Cure times vary according to the materials being bonded, but most combinations are fast-fixing in 5 - 50 seconds.

### Applications

KB604 instant adhesive is widely used in applications including: jewellery assembly, various optical products and general industrial manufacturing processes where odour / fumes are an issue.

KB604 will not attack many low density foams such as expanded polystyrene, allowing cyanoacrylate to be used for bonding these types of substrates.

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

### Technical Features

Resin:	Alkoxy Alkyl Cyanoacrylate
Appearance:	Clear
State:	Liquid
Cure Speed with Activator:	<3 seconds
Cure Speed w/o Activator:	5 - 50 seconds
Viscosity <sup>1</sup> :	80 - 120 cPs
Gap Fill:	0.15mm
Flash Point:	>85°C
Specific Gravity:	1.06
Max. Operating Temp:	-50°C to +70°C
Shelf Life @ 5°C:	6 Months

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

### Cured Performance

Full Cure Time: 24 Hrs @ 21°C

Tensile Shear Strength <sup>2</sup>:

After 3 minutes: 4 - 11 M Pa

After 24 Hours: 9 - 20 M Pa

<sup>2</sup> ISO 6922

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

### Fixture Times

Metal / Metal: <50 seconds

ABS / ABS: <20 seconds

Nitrile Rubber / Rubber <15 seconds

Wood (Balsa) <5 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.



CHEMENCE®

## Technical Data Sheet

# KB604

## Cyanoacrylate Instant Adhesive

### 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 KB604 performs best with minimal gaps between substrates.

Hold parts together firmly until handling strength is achieved.

Product is normally hand applied from the bottle.

KB604 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.

### Disclaimer

Information presented herein has been compiled from sources considered to be accurate and reliable, but is not guaranteed to be so. Nothing herein shall be considered as recommending practices or products in violation of any patent, law or regulation. It is the user's responsibility to determine the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary.

**WE MAKE NO WARRANTIES REGARDING THE PRODUCTS AND DISCLAIM ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

