



KB3906

Product Description:

KRYLEX® KB3906 medical device ethyl cyanoacrylate adhesive displays excellent adhesion for difficult to bond substrates that require uniform stress distribution and high shear strength. KB3903 is designed for disposable medical device assembly and provides rapid bonding with a wide variety of materials.

Product Features

- Low Viscosity
- Fast curing
- ISO10993-5 approved
- Excellent multi-substrate adhesion
- Flexibility
- Solvent Free

Typical Applications: Medical device assembly, General assembly

Compatible Accelerator/Primer

Activators can be used for fillet cure or for priming absorbent surfaces. Accelerators may craze certain substrates.

Primer to the 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 may require the use of KRYLEX® KP1901.

Cure Speed and Bond gap

KRYLEX® cyanoacrylates give best results on close fitting parts. The product should be applied in a very thin line to ensure rapid polymerization and a strong bond. Excessive bond gaps will result in slower cure speeds KRYLEX® KP1901 Cyanoacrylate Activator/Primer may be used to greatly increase cure speeds. The use of an activator can reduce the final bond strength by up to 30% - KRYLEX® recommends testing on the parts to measure the effect.

UNCURED PROPERTY	VALUE	TEST METHOD
Viscosity (cps)	100	U Tube
Specific Gravity	1.04	ASTM D1875
Appearance	Clear	N/A

Cure Rate vs Substrate	Fixture Time (seconds)
ABS	5
PVC	5

Lap Shear Properties

Cured for 24 hours @ 22°C; Lap Shear Strength - ISO 4587:

SUBSTRATES	Max Force (MPa)
PET - PET	1.690402
TPU - TPU	0.346749
ACR - ACR*	3.498452
PVC - PVC*	3.04644
ABS – ABS*	5.417957
NYL - NYL	1.26935
PC - PC*	2.563467

*Indicates substrate failure at 0.5 inch overlap

General Information

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

Removal of Cured Cyanoacrylate

Cured cyanoacrylate may be removed from most substrates, and parts disassembled, with KRYLEX® KP68 Debonder. It is not possible to fully remove cyanoacrylate from fabrics.

Directions for Use

Bond speed is very fast. Ensure that parts are properly aligned before bonding. KRYLEX® Activators may be required if there are gaps or porous surfaces. Some plastics may require application of KRYLEX® KP1901 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 KRYLEX® representative for further advice on dispensing solutions.

Storage

Store in a cool area out of direct sunlight. Refrigeration to 40° F gives optimum storage stability.

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

All the test data, recommended procedures and other statements contained herein are furnished for information only for this experimental material and accuracy of the information is not guaranteed. Chemence cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Chemence specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Chemence products. Chemence specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Chemence patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.