



The Glue People[®]

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HV

High Viscosity Cyanoacrylate Adhesive

General Description

Tradelock HV is a medium viscosity modified Ethyl Cyanoacrylate adhesive. It is suitable for bonding a very wide range of materials, including some porous ones, where a fast cure speed is required.

Application

Tradelock HV is specially formulated for the bonding of plastics, rubbers, wood, paper, leather, metals and other common substrates. Recommended for use on close fitting parts and fairly smooth, even surfaces. Tradelock HV has excellent gap filling properties.

Directions For Use

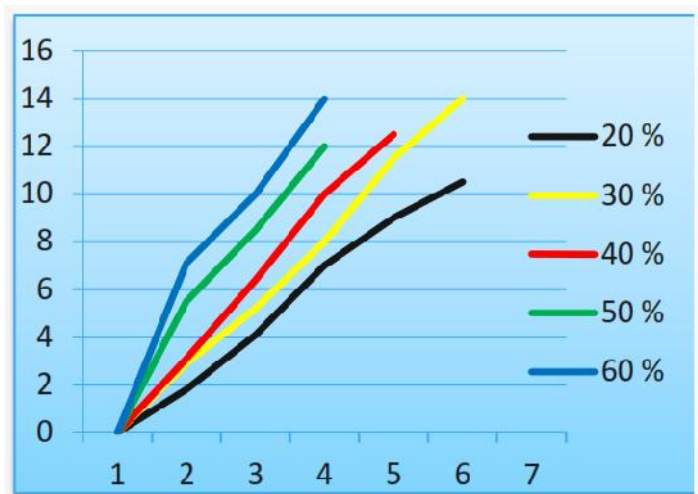
Bond speed is very fast so ensure that parts are properly aligned before bonding. Activators may be required if there are gaps or porous surfaces. Some plastics may require application of a primer before bonding.

Ensure parts are clean, dry and free from oil, grease or any other contaminants liable to impair adhesion.

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.

Physical data

Chemical Type	Ethyl
Appearance	Clear
Specific Gravity	1.08
Viscosity (cPs)*	Range 1275-1650 Typical Value 1500
Tensile Strength**	21 N/mm ²
Fixture Time	5-60 seconds
Full Cure	24 Hours
Flash Point	> 85°C
Max Gap Fill	0.2mm
Operating Temp Range	-50°C to +80°C
Shelf Life @ 5°C	12 Months



* Brookfield LVF, Spindle 3 @ 30rpm
 ** ISO 6922

Typical Curing Performance

Steel / Steel	< 60 seconds
ABS / ABS	< 20 seconds
Rubber / Rubber	< 15 seconds
Wood (Balsa)	< 3 seconds

Cure Speed vs Environmental Conditions

Cyanoacrylates require surface moisture on the substrates in order to initiate the curing mechanism. The speed of the 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 Substrates

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

Cure Speed vs Activator

Activators may be used in conjunction with cyanoacrylate adhesives where the cure speed needs to be accelerated. Cure speeds of less than 2 seconds can be obtained with most cyanoacrylates.

The use of an activator may reduce the final bond strength by up to 30%. Testing on the parts to measure the effect is recommended.

Cure Speed vs Bond Gap

Our cyanoacrylate adhesives 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 times.

Typical Environmental Resistance

Tradelock Cyanoacrylates 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 the full strength at 21°C.

Tradelock 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.

Removal of Cured Adhesive

Cured cyanoacrylate may be removed from most surfaces, and parts disassembled, with a debonder. It is not possible to remove cured cyanoacrylate from fabrics.

General Information

Storage

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

Important Notice

This leaflet is for general guidance only and may contain inappropriate information under particular conditions of use. All recommendations and suggestions are therefore made without guarantee. Samples will be provided upon request to enable customers to satisfy themselves as to the suitability of the product for any specific purpose and to assess the product under their own working conditions.

Before using this product ensure that you have been supplied with and have read carefully the following information.

- The hazard label (complying with latest CDG/CPL regulations) applied to the container.
- Material Safety Data Sheet, Tradelock HV.

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