Cyanoacrylate 123

Product Data Sheet

Product Description

TIGERHAWK 123 is a single component low viscosity cyanoacrylate adhesive. It is an extremely fast setting adhesive, ideal for bonding preassembled parts, rubber and leather. It is particularly designed to set and adhere rapidly to inactive surfaces.

Physical Properties

Monomer (Liquid)

Base Compound	Ethyl Cyanoacrylate
Appearance	Colorless Liquid
Viscosity (cP @ 68°F)	30 cP
Specific Gravity (g/cc)	1.06
Flash Point (TCC)	185°F
Shelf Life @40°F	1 year unopened

Military Specifications

Mil-A-46050C
Type II, Class 1

Curing Properties

Ambient surface moisture will initiate the hardening process. Handling strength is reached in a short period of time and varies depending on environmental conditions and substrates being bonded. Product will continue to cure for at least 24 hours before full strength and resistances are developed.

Setting Time (68°F, 65% R.H.)

Steel	5 to 12 seconds
Aluminum	7 to 14 seconds
Neoprene	< 6 seconds
ABS	5 to 13 seconds
Polycarbonate	10 to 25 seconds
PVC	3 to 7 seconds
Pine	2 to 5 seconds

Curing Performance

The gap of the bond line will affect set speed. Smaller gaps tend to increase the speed. Activators can be applied to improve set speed but may also impair overall adhesive performance.

Polymer (Cured)

Appearance	Colorless Solid
Service Temperature Range	-65°F to 200°F
Softening Point	329°F
Refractive Index (ND 20)	1.49
Full Cure Time	24 Hours
Dielectric Strength (KV/mm)	11.6
Dielectric Constant (@ 1Kc)	5.4
COE (in./in./F)	.000126
Tensile Strength (steel/steel)	3200 psi
Solubility	Nitromethane, Acetone, Dimethylformamide

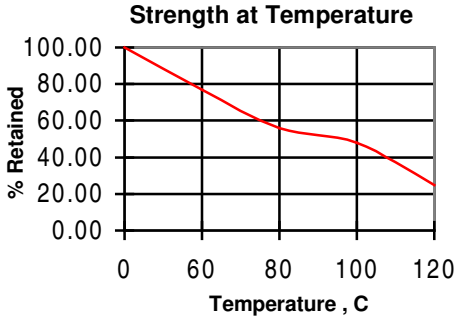
Performance of Cured Materials

Tensile Shear strength after 48 hours at 20° to 25°C

Substrate	Range in N/mm2
Blasted Steel	18 to 26
Etched Aluminum	11 to 18
Neoprene	> 10
ABS	> 5
Polycarbonate	> 5
PVC	> 6

Temperature Resistance

Sheer Strength on steel after 1 week at 22 °C



Technical data contained within this document is intended for reference only
For assistance and recommendations on specifications for this product, contact AMV
ventas@amv.com.mx

Chemical Resistance

Sheer strength on steel after 12 month soak

Solvent	% Strength Retained
Motor Oil	90
Gasoline	100
Tricloroethane	100
Freon TA	100
10% NaOH	0
10% Hcl	0
Water	0

General Instructions

Surfaces to be bonded should be clean and dry.
Dispense a drop or drops to one surface only. Apply only enough to leave a thin film layer after compression.

Press parts together and hold firmly for a few seconds. Good contact is essential. An adequate bond develops in less that one minute and maximum strength is attained in 24 hours.
Wipe off excess adhesive from the top of the container and recap. Cyanoacrylate products if left uncapped may deteriorate by contamination from moisture in the air. Because Cyanoacrylate products cure by polymerization, whitening may appear on the surface of the container or the bonded materials. Should this happen, wipe surfaces well with acetone.

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS)

General Information

Storage

Refrigeration at 40℉ provides optimum storage stability.

Note

Prior to use, remove all surface contaminants such as oil or grease. Products like isopropyl alcohol can be used. Test compatibility of cleaner with substrate.
Make sure surface is completely dry before bonding.

Health & Safety in use

CAUTION: SuperGlues bond skin and eyes on contact. If accidental skin bonding occurs, wash area with warm soapy water and slowly pry skin apart using a blunt object (such as a teaspoon handle.) In case of eye contact, bathe immediately with water and seek immediate medical attention.