

Cyanoacrylate 322 Product Data Sheet

Product Description

Vibra-TITE 322 is a single component high viscosity cyanoacrylate adhesive with a quicker setting speed than most high viscosity materials. Suitable for all general-purpose bonding.

Physical Properties

Monomer (Liquid)

Base Compound	Ethyl Cyanoacrylate
Appearance	Colorless Liquid
Viscosity (cP @ 68°F)	1500 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 3

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.)

octime time (00 1, 05 /0 Killi)		
Steel	20 to 40 seconds	
Aluminum	10 to 30 seconds	
Neoprene	< 10 seconds	
ABS	15 to 40 seconds	
Polycarbonate	25 to 50 seconds	
PVC	20 to 40 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	-65°F to 200°F
Range	
Softening Point	329°F
Refractive Index	1.49
(ND 20)	
Full Cure Time	24 Hours
Dielectric Strength	11.6
(KV/mm)	
Dielectric Constant	5.4
(@ 1Kc)	
COE (in./in./F)	.000126
Tensile Strength	3400 psi
(steel/steel)	
Solubility	Nitromethane,
	Acetone,
	Dimethylformamide

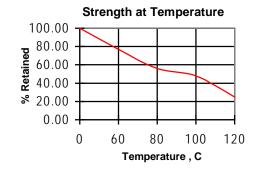
Performance of Cured Materials

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

Substrate	Range in N/mm2
Blasted Steel	19 to 25
Etched Aluminum	12 to 20
Neoprene	> 10
ABS	> 6
Polycarbonate	> 5
PVC	> 6

Temperature Resistance

Sheer Strength on steel after 1 week at 22 $^{\circ}\text{C}$





Chemical Resistance

Sheer strength on steel after 12 month soak

% Strength Retained

Solvent

Motor Oil	100
MOIOI OII	100
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.

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

General Information

Storage

Refrigeration at 40 °F 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.