

**Product Description**

Vibra-TITE 301 is a fast setting, low to medium viscosity cyanoacrylate adhesive for use on all types of substrates. It is particularly designed to set and adhere rapidly to inactive surfaces such as wood, leather and fiberglass. Vibra-TITE 301 offers viscosity and flow characteristics that are ideal for filling small gaps.

**Physical Properties**

**Monomer (Liquid)**

Base Compound	Ethyl Cyanoacrylate
Appearance	Colorless Liquid
Viscosity (cP @ 68°F)	100 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 2

**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	8 to 12 seconds
Aluminum	8 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

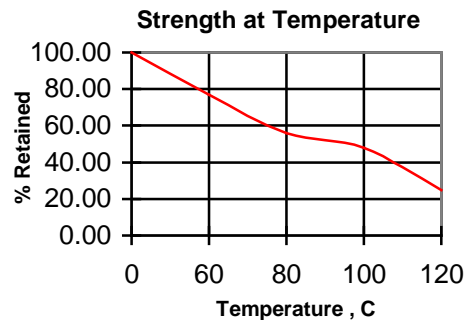
**Performance of Cured Materials**

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

Substrate	Range in N/mm <sup>2</sup>
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





# Cyanoacrylate 301 Product Data Sheet

## Chemical Resistance

Shear strength on steel after 12 month soak

<i>Solvent</i>	<b>% Strength Retained</b>
Motor Oil	90
Gasoline	100
Trichloroethane	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 than 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.

## **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**

See Safety Data Sheet for hazard statements, precautionary statements, and first aid information.