

Product Description

Kem 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 mat. Vibra-TITE 301 offers viscosity and flow characteristics that are ideal for filling small gaps.

Physical Properties

#	Parameter	Specifications
1	Base Compound	Ethyl Cyanoacrylate
2	Appearance	Colorless
3	Viscosity, cp @ 20°C	100
4	Specific Gravity	1.06
5	Flash Point (TCC)	85
6	Shelf Life @ 5°C (as Packed)	12 Months

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 Properties (20°C, 85% RH)

#	Material	
1	Steel	8 – 12 sec
2	Aluminum	8 – 14 Sec.
3	Neoprene	< 6 Sec.
4	ABS	5 – 13 sec
5	Polycarbonate	10 – 25 sec.
6	PVC	3 – 7 Sec.
7	Pine	2 – 5 sec.

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	-53 – 95°C
Softening Point	160°C
Refractive Index (ND 20)	1.49
Full Cure Time	24 Hours
Di-electric Strength (kv/mm)	11.6
Di-electric Constant (@ 1 kC)	5.4
COE (in./in./C)	0.000126
Tensile strength (Steel/Steel)	3200 Psi
Solubility	Nitromethane, Acetone, Dimethylformaide

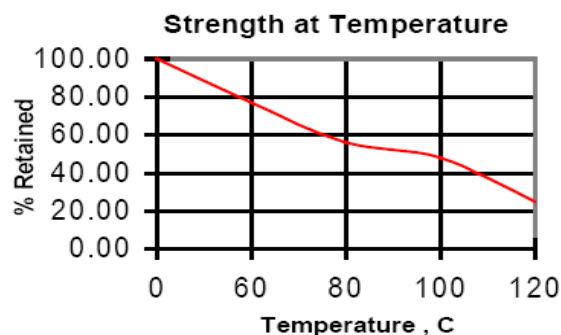
Performance of Cured Material

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

Substrate	Range in N/mm ²
Blasted Steel	18 – 26
Etched Aluminum	11 – 18
Neoprene	> 10
ABS	> 5
Polycarbonate	> 5
PVC	> 6

Temperature Range

Sheer Strength on steel after 1 week at 22 °C



Chemical Resistance

Sheer strength on steel after 12 month soak

	% Strength Retained
Motor Oil	90
Gasoline	100
Tri-chloroEthane	100
Freon TA	100
10% NaOH	0
10% HCl	0
Water	0

General Information

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.

Storage

Refrigeration at 5°C 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

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.

NOTE TO USER

The information contained in this document while based on evidence and reliable methods can not be considered exhaustive. This information are current to the date of issuance of this data sheet.

The user, under its own responsibility, shall respect all the existing provisions on hygiene and safety and shall verify every time the features and the specific and appropriate way to use the product, cause the respect of the provisions is not under producer's direct control. The manufacturer does not guarantee nor assume any liability or responsibility for whatsoever harm that might result from a misuse of the product or for damages that have arisen after the product's distribution.

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