



Product Description

Frame Fast® 290 Adhesive is a high viscosity engineering grade adhesive developed for coarse mesh counts of 260 or greater. **Frame Fast® 290 Adhesive** can be used on aluminum, steel, and wood or plastic insert strips used in self tensioning frames. This product exhibits extraordinary strength with a tensile strength of 3500 psi.

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.)

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 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)	3500 psi
Solubility	Nitromethane, Acetone, Dimethylformamide

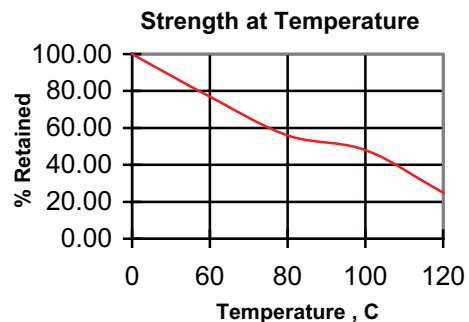
Performance of Cured Materials

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

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

Temperature Resistance

Shear Strength on steel after 1 week at 22 °C





290

Adhesive

Chemical Resistance

Sheer strength on steel after 12 month soak

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

Storage

Products should be stored unopened in a cool, dry place out of direct sunlight. Products can be refrigerated for improved shelf life but should be brought back to room temperature before use

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

General Instructions

1. Apply a single uninterrupted bead of **Frame Fast® 290 Adhesive** to the face of the frame.
2. Be sure the frame and fabric/mesh are in contact.
3. Spread the adhesive immediately with any flat-edged tool.
4. Spray any **Frame Fast® Activator** lightly but thoroughly from about 14 inches away from the frames. The adhesive will harden instantly.
5. Trim excess fabric/mesh. Screened frame is now ready to use. Maximum strength is achieved in 24 hours.

NOTE

The data contained herein are furnished for information only and are believed to be reliable. Cyberbond L.L.C. cannot assume responsibility for the results obtained by others over whose method Cyberbond L.L.C. does not control. It is the user's responsibility to determine suitability for the product or of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Cyberbond L.L.C. specifically disclaims all warranties of merchantability or fitness for a particular purpose arising from sale or use of Cyberbond L.L.C. products. Cyberbond L.L.C. specifically disclaims any liability for consequential or incidental damages of any kind, including loss of profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Cyberbond L.L.C. patents which may cover such processes or compositions. We recommend that each prospective user test the proposed application to determine its suitability for the purpose intended prior to incorporating any product or application in its manufacturing process using the data as a guide.

Frame Fast® 290 Adhesive

Page 2 of 2

**Cyberbond L.L.C. ☒ 401 North Raddant Road ☒ Batavia, IL 60510
Phone 630-761-8900 ☒ Fax 630-761-8900 ☒ Website www.framefast.com**