

## #612 QUICK-WELD #1 Low Viscosity Cyanoacrylate Adhesive

**QUICK-WELD #1** is a low viscosity, fast cure speed, surface insensitive cyanoacrylate. It is specifically formulated to bond difficult surfaces with high industrial strength. Used mainly for bonding close fitting parts or where penetration is needed.

### APPLICATIONS:

- Ideal for bonding rough, porous and acidic surfaces including wood, cardboard, balsa wood, rubbers, plastics, metals, leather, etc.
- Wide variety of industrial manufacturing and repairing applications.
- Meets Military specification MLLA 46050 Type II Class II.

### BONDING TIMES:

Plastics	2-5 seconds
Wood	1-5 seconds
Metals	8-10 seconds
Rubbers	<3 seconds
Leather	5-15 seconds
Ceramics	12-18 seconds

### PHYSICAL PROPERTIES:

#### LIQUID

Composition	Surface insensitive Ethyl Cyanoacrylate
Appearance	Colorless Liquid
Viscosity @ 77°F (25°C)	90-120 cps
<i>Brookfield LVF, Spindle 1-60 rpm</i>	

#### CURED ADHESIVE

Gap Filling	0.2 mm
Tensile Shear Strength	18-28 n/mm <sup>2</sup> (2610-4060 psi)
Service Temperature Range	-76 to 176°F (-60 to +80°C)
Full Cure	24 hours
Melting Point Temperature	320 to 338°F (160 to 170°C)

Shear Strength ASTM D 1002/DIN 53283

Grit Blasted Steel	>20 n/mm <sup>2</sup> (>2900 psi)
Etched Aluminum	>18 n/mm <sup>2</sup> (>2610 psi)
Rubbers	>22 n/mm <sup>2</sup> (>3190 psi)
Wood	>25 n/mm <sup>2</sup> (>3625 psi)
Polycarbonate	>12 n/mm <sup>2</sup> (>1740 psi)
ABS	>10 n/mm <sup>2</sup> (>1400 psi)

### PHYSICAL PROPERTIES:

Coefficient of thermal conductivity, ASTM C177, W.m <sup>-1</sup> k <sup>-1</sup>	0.1
Glass Transition Temperature, ASTM E228	248°F (120°C)
Coefficient of thermal expansion, ASTM D696, K <sup>-1</sup>	75x10 <sup>-6</sup>

### ELECTRICAL PROPERTIES:

Dielectric strength, ASTM D149, kV/mm	25
Volume resistivity, ASTM D257, Ohm.cm	1x10 <sup>16</sup>
Dielectric constant, 77°F (25°C), ASTM D150	2.7

NOTICE TO PURCHASER: The following warranty is in lieu of all other expressed or implied warranties, specifically all goods are manufactured of first class materials and by competent professionals. We have no control over the use and application of our products. Our liability shall not exceed the purchase price.