

Chem-SetTM CT45 Cyanoacrylate Adhesive

Low Viscosity, Surface Insensitive

Chem-Set CT45 is a clear toughened ethyl cyanoacrylate adhesive. It is Low in viscosity combined with excellent shock and impact resistance. It is specifically formulated for bonding wide range of substrates including metals, wood, plastics, leather, rubbers, ceramics, cardboard, etc.

APPLICATIONS:

- ✓ Ideal for wide variety of manufacturing and assembly of industrial parts.
- ✓ Ideal where alignment of parts is required.

BONDING TIMES:

Plastics	2-5 seconds	Rubbers	< 4 seconds
Steel	5-11 seconds	Leather	5-15 seconds
Aluminum	8-10 seconds	Ceramics	12-18 seconds

PHYSICAL PROPERTIES

Liquid

Composition	Toughened Ethyl Cyanoacrylate
Appearance	Colorless liquid
Viscosity@ 25 °C, cps	30-60
Cone & Plate, Spindle 75, Speed 3000s-1	

Cured Adhesive

Gap Filling	0.2 mm
Tensile Shear Strength	18-28 n/mm ²
Service Temperature Range	-60 to +80 °C
Full Cure	24 hours
Melting Point Temperature	160 to 170 °C

Shear Strength ASTM D 1002/DIN 53283

Grit Blasted Steel	> 20 N/mm ²	Etched Aluminum	> 18 N/mm ²
Rubbers	> 22 N/mm ²	Wood	> 25 N/mm ²
Polycarbonate	> 12 N/mm ²	ABS	> 10 N/mm ²

Physical Properties:

Coefficient of thermal conductivity, ASTM C177, W.m ⁻¹ k ⁻¹	0.1
Glass Transition Temperature, ASTM E228,	120 °C
Coefficient of thermal expansion, ASTM D696, K ⁻¹	75 x 10 ⁻⁶

Electrical Properties:

Dielectric strength, ASTM D149, kV/mm	25
Volume resistivity, ASTM D257, Ohm.cm	1 x 10 ¹⁶
Dielectric constant, 25 °C, ASTM D150	2.3

APPLICATION INSTRUCTIONS:

- ✓ All surfaces must be clean, dry, dust and grease free. Best result will be achieved with surfaces that have been lightly abraded immediately prior to bonding.
- ✓ If using accelerator apply to one component surface only. Apply thin film of adhesive to the other surface and bring the pieces together immediately. Hold for few seconds without disturbing the joints.
- ✓ When bonding “O” rings, cut a fresh surface onto each end of the rubber to gain the best possible strength.

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