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## ChemTools 8401 Cyanoacrylate Adhesive

Medium Viscosity, Fast Cure Speed

**ChemTools 8401** is medium viscosity combined with fast cure speed, surface insensitive cyanoacrylate adhesive (CA). It is specifically formulated to bond difficult surfaces with high industrial strength.

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

### PHYSICAL PROPERTIES

#### Liquid

Composition	Surface Insensitive Ethyl Cyanoacrylate
Appearance	Colorless liquid
Viscosity @ 25°C Brookfield LVF	80-120 cps

#### Cured Adhesive

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



## Mechanical Properties

Glass Transition Temperature, ASTM E228, °C	122
Dielectric Strength, ASTM D149, v/mil	625
Coefficient of thermal expansion, ASTM D696, K <sup>-1</sup>	90 x 10 <sup>-6</sup>
Coefficient of thermal conductivity, ASTM C177, W.m <sup>-1</sup> K <sup>-1</sup>	0.1
Shear Strength ASTM D 1002/DIN 53283	
Grit Blasted Steel	>20 N/mm <sup>2</sup>
Etched Aluminum	>18 N/mm <sup>2</sup>
Rubbers	>22 N/mm <sup>2</sup>
Wood	>25 N/mm <sup>2</sup>
Polycarbonate	>12 N/mm <sup>2</sup>
ABS	>10 N/mm <sup>2</sup>

## 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.

**PRECAUTIONS:** This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the material.

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