# CHEMTOOLS

## A NEW FORCE IN CHEMICAL MANUFACTURING

Unit 2, 14-16 Lee Holm Road St Marys NSW 2760 Australia Ph: 1300 738 250 (Australia) Ph: +61 2 9833 9766 (International) Fax: 02 9623 3670 sales@chemtools.com.au www.chemtools.com.au

# **TECHNICAL DATA SHEET**

**AUGUST 2014** 

#### **PRODUCT NAME**

8401 Cyanoacrylate Adhesive

### **PRODUCT RANGE**

Part Number Available Size

8401-20 20g 8401-50 50g 8401-500 500g



Refer to MSDS for product safety guidelines

# 8401 Surface Insensitive Ethyl Cyanoacrylate Adhesive

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:**

Plastics2 - 5 secondsRubbers< 3 seconds</th>Wood1 - 5 secondsLeather5 - 15 secondsMetals8 - 10 secondsCeramics12 - 18 seconds

#### **LIQUID PROPERTIES:**

Composition Surface Insensitive Ethyl Cyanoacrylate

Appearance Colourless liquid Viscosity @ 25°C Brookfield LVF 80 - 120 cps

#### **CURED ADHESIVE PROPERTIES:**

Gap Filling 0.2 mm

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

#### PHYSICAL PROPERTIES:

Glass Transition Temperature, ASTM E228	122°C
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>	0.10

#### **MECHANICAL PROPERTIES:**

#### Shear Strength (ASTM D 1002/DIN 53283)

, ,	
Grit Blasted Steel	> 20 N/mm <sup>2</sup>
Etched Aluminium	> 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>
Grit Blasted Steel	> 20 N/mm <sup>2</sup>
Etched Aluminium	> 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 is 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.

#### **WARRANTY:**

All products purchased from or supplied by Chemtools® are subject to terms and conditions set out in the contract. Chemtools® warrants only that its products meet the specifications designated as such herein, or in other publications. All other information supplied by Chemtools® is considered accurate, but is furnished upon the express condition. The customer shall make its own assessment to determine the products suitability for a particular purpose. Chemtools® makes no other warranty, either expressed or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or products will not infringe any patent.