CHEMTOOLS

A NEW FORCE IN CHEMICAL MANUFACTURING

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TECHNICAL DATA SHEET

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PRODUCT NAME

8408 Cyanoacrylate Adhesive

PACKAGING OPTIONS

Part Number Available Size

8408-20 20g 8408-50 50g 8408-500 500g



Refer to MSDS for product safety guidelines

8408 Low Odour, Low Bloom, Low Viscosity Cyanoacrylate Adhesive

Chemtools® 8408 is a very low viscosity cyanoacrylate adhesive with low odour and low blooming characteristics. This technology offers excellent product performance and ease of processing, eliminating the need for ventilation and reducing frosted residues in critical cosmetic bonding.

APPLICATIONS:

- Bonding applications where ventilation is a problem. Ideal for critical cosmetic bonding.
- Suitable for wide variety of assembly of Industrial and medical devices.

BONDS:

AcrylicPolycarbonatePolyimidePVCPEEKPETGPolysulfoneWoodLatexSteelAluminiumZinc

Dichromate

BONDING TIMES:

Under normal conditions, the surface moisture initiates the curing process. Functional strength develops in a short time but curing continues for at least 24 hours before full chemical/solvent resistance is developed. The rate of cure will depend on substrate used.

| Stainless Steel | 30 - 70 seconds | Aluminium | 5 - 20 seconds |
|-----------------|-----------------|----------------|-----------------|
| Polycarbonate | 20 - 60 seconds | PVC | 20 - 50 seconds |
| Neoprene | < 5 seconds | Phenolics | 30 - 60 seconds |
| ABS | 20 - 60 seconds | Nitrile Rubber | 5 - 7 seconds |

LIQUID PROPERTIES:

Composition

Alkoxy-Ethyl Cyanoacrylate

Appearance

Colourless liquid

3 - 5 cps

3 - 5 cps

CURED ADHESIVE PROPERTIES:

| Gap Filling | 0.05 mm |
|---------------------------|---------------|
| Tensile Shear Strength | 15 - 26 N/mm² |
| Service Temperature Range | -60 to +80°C |
| Full Cure | 24 hours |
| Melting Point Temperature | 160 to 170°C |

MECHANICAL PROPERTIES:

Shear Strength (ASTM D1002/DIN 53283)

| Grit Blasted Steel | 14 - 22 N/mm ² |
|--------------------|---------------------------|
| Etched Aluminium | 10 - 15 N/mm ² |
| Neoprene Rubber | 10 - 15 N/mm ² |
| PVC | 3 - 9 N/mm² |
| Polycarbonate | 5 - 10 N/mm ² |

PHYSICAL PROPERTIES:

| Coefficient of thermal conductivity, ASTM C177, W.m ⁻¹ .K ⁻¹ | 0.10 |
|--|-----------------------|
| Coefficient of thermal expansion, ASTM D696, K ⁻¹ | 90 x 10 ⁻⁶ |
| Glass Transition Temperature, ASTM E228 | 150°C |
| Dielectric strength, ASTM D149, V/mil | 625 |

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.
- Thin bond lines favour high cure speed. Increasing the bond gap will slow down the rate of cure.

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:

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