



A NEW FORCE IN CHEMICAL MANUFACTURING

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TECHNICAL DATA SHEET

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PRODUCT NAME

8460 Cyanoacrylate Adhesive

PACKAGING OPTIONS

Part Number	Available Size
8460-20	20g
8460-50	50g
8460-500	500g



Refer to MSDS for product safety guidelines

8460 Low Odour, Low Bloom Cyanoacrylate Adhesive

Chemtools® 8460 is a high viscosity cyanoacrylate adhesive with low odour and low blooming characteristics. This technology offers excellent product performance and easy processing. It eliminates the need for ventilation and reduces frosted residues in critical cosmetic bonding.

APPLICATIONS:

- Suitable for assembling a wide variety of industrial and medical devices.
- Rapid bonding of a wide range of plastics, rubbers, wood, metals and elastomeric materials.

BONDS:

Acrylic	Polycarbonate	Polyamide	PVC
PEEK	PETG	Polysulfone	Wood
Latex	Steel	Aluminium	Zinc Dichromatic

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 developed. The rate of cure will depend on substrate used.

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

LIQUID PROPERTIES:

Composition	Alkoxy-Ethyl Cyanoacrylate
Appearance	Clear Yellow liquid
Viscosity @ 25°C Brookfield LVF	45 cps

CURED ADHESIVE PROPERTIES:

Gap Filling	0.15 mm
Tensile Shear Strength	15 - 26 N/mm ²
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
Neoprene Rubber	10 - 15 N/mm ²
Etched Aluminium	10 - 15 N/mm ²
Polycarbonate	5 - 10 N/mm ²

PHYSICAL PROPERTIES:

Coefficient of Thermal Conductivity, ASTM C177, W.m ⁻¹ .K ⁻¹	0.1
Coefficient of Thermal Expansion, ASTM D696, K ⁻¹	80 x 10 ⁻⁶
Glass Transition Temperature, ASTM E228	130°C
Dielectric Strength, ASTM D149, V/mil	625

CHEMICAL RESISTANCE PROPERTIES:

Chemical	Temperature	<u>% Initial Strength Retained</u>	
		<i>500 hours</i>	<i>1000 hours</i>
Isopropanol	22°C	85	85
Petrol	22°C	80	75
Motor Oil	40°C	90	90
Mineral Spirit	22°C	90	90

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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