

8420 Adhesive

Cyanoacrylate Adhesive

8420 Adhesive is a single component Cyanoacrylate adhesive of very low viscosity. It is designed for the bonding of materials that have relatively inactive surfaces and is excellent for the bonding of elastomers and rubbers with excellent humidity resistance. 8420 Adhesive can be used for bonding rubber and metal components, fabric to metal and seals & O rings.

Special Features

- Bonds in seconds all rubber materials.
- 100% Solventless
- Rapid setting
- Good humidity resistance
- Low viscosity, good wicking properties

Liquid Properties*

Property	Units	Typical Value
Monomer	-	Modified ethyl cyanoacrylate
Appearance	-	Colourless
Density	g/cm ³	1.05
Viscosity (25°C, Brookfield)	mPa.s	2 – 10
Flash point (Cleveland open cup)	°C	> 85

Cured Properties*

Property	Units	Typical Value
Refractive index (ND20)	-	1.46
Hardness (Rockwell)	-	85
Specific resistance	OHM/cm	8 x 10 ¹²
Dielectric constant (@ 1MHZ)	-	3.44
Softening point	°C	150
Working temperature range	°C	-55 to +80

Technical Data Sheet



Tensile Shear Strength*

Material	Fixture Time	Strength (N/mm ²)
ABS/ABS	10 Seconds	3*
Nitrile	5 Seconds	2*
EPDM	10 Seconds	3*
PVC	10 Seconds	3
Mild Steel (degreased)	20 Seconds	10
Aluminium (degreased)	15 Seconds	5

* Substrate failure

Method of Use

Before application of 8420 Adhesive, ensure surfaces are close fitting and that surfaces are clean and dry. Where possible the working environment should have a relative humidity of at least 50%. Apply adhesive to one surface. Press surfaces together and hold for 10 seconds or as indicated below. Cure speed is rapid so exercise care when aligning.

Substrate	Typical Bonding Time
Plastics	5 - 60 seconds depending on substrates.
Rubbers	2 - 20 seconds depending on substrates.
Metals (degreased)	10 - 60 seconds depending on substrates.

Cure performance can be enhanced if necessary, by using 8479 cyanoacrylate activator. Activator should be sprayed onto one surface only. After the solvent has evaporated, apply 8420 Adhesive to the other surface and assemble immediately.

This product is not suitable for permanent glass bonding, or applications where the bonded joint may be immersed in water.

Storage

Store in original sealed upright container between +3°C and 20°C in a dry area out of direct sunlight. If stored under the above condition, the shelf life of 8420 Adhesive is 12 months. The lower the temperature the longer the ultimate shelf life, but bring to room temperature before use.

Packaging

8420 Adhesive is supplied in 500ml packs.

Further Information

*This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

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Before using any of our products, users should familiarise themselves with the relevant Technical and MSDS provided by Alchemie Ltd.

Alchemie Limited

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- Rapid Prototyping
- Prototypes
- Casting
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- Laminating
- Model Making
- Master Models
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