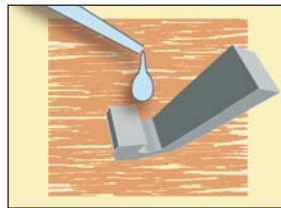


Product data

501

Multi-surface bonder – liquid

Cyanoacrylate



General description

A specially formulated, medium viscosity instant adhesive that is less dependent on surface moisture than other cyanoacrylates. It is therefore ideal for bonding porous or absorbent materials – wood, paper, card, leather, fabric, ceramics and cork as well as rubber, metals and some plastics.

AJETT 501 will bond most substrates in under 10 seconds. It has high shear strength properties.

Benefits

- Very fast curing, single component cyanoacrylate.
- Specifically formulated to bond porous surfaces – but also suitable for other materials (see right).
- Medium viscosity – but flows easily.
- Cures at room temperature.
- Colourless.
- Less dependent on surface moisture than other cyanoacrylates.
- Economical to use – only a few drops are required for an effective bond.
- Good temperature range in service.
- Easy to apply manually or automatically.

- Handling strength in under 5 seconds, depending on substrate
- Good tensile shear strength, even on very porous surfaces – see over.
- Classified under US Military specification MIL-A-46050C, Type II, Class I

Typical uses – bonding

Porous/absorbent surfaces

- Wood.
- Leather.
- Paper and card.
- Ceramics.
- Fabric.
- Cork.

Non-porous/absorbent surfaces

- Rubber.
- Metals.
- Some plastics.

Application

- From the bottle by hand or automated.
- Single component – no mixing.
- Invisible bonds.

Cost saving

- Labour savings – no fixtures, jigs, clamps normally needed.
- Use direct from the bottle.

Cyanoacrylate adhesives cure as a result of a chemical reaction to substrate surface moisture. Although functional strength is developed rapidly, full cure takes 24 hours.

Technical data

Composition	Ethyl-2-cyanoacrylate
Physical appearance	Liquid
Colour	Clear, colourless
Odour	Sharp, characteristic
Viscosity at 25°C	90 to 120 mPa.s
Flash point, closed cup	>81°C
Temperature range	-30 to +70°C
Fixture time	See below
Full cure	24 hours at 25°C
Tensile shear strength	See below, fully cured performance
Gap filling	0.15 mm
Solubility	DMF, acetonitrile, acetone
Conforms to US Military specification	MIL-A-46050C, Type II, Class I

Fixture time, seconds

Balsa wood to balsa wood	<5.0
Nitrile to nitrile	<5.0
Neoprene to neoprene	<5.0
EPDM to EPDM	<5.0
PVC to PVC	3 to 10
Steel to steel	10 to 20
Polycarbonate to polycarbonate	10 to 40
Oak to oak	90 to 180

Packaging

20 and 50g plastic bottles. Catalogue numbers **501/20** and **501/50**. Other sizes available to order.

Shelf life

12 months if stored at temperatures between 5 and 25°C in closed original packaging and away from sunlight. To avoid contamination, do not return unused product to containers. Refrigeration at 5 to 8°C extends shelf life.

Precautions for use

Cyanoacrylate – DANGER! Bonds skin and eyes in seconds. Keep out of reach of children. In case of contact with eyes, consult a doctor. Please refer to the **AJETT** material safety data sheet *MSDS 501* for other information. Do not mix adhesive directly with a primer/activator.

NOTE: Data provided shows mean averages arrived after laboratory testing. Manufactured batches may vary slightly.

This publication is intended to serve as a guide only. Customers should satisfy themselves by appropriate trials that the product is suitable for its intended use.

The information is given in good faith and based on the state of our knowledge about the product –

Sheer strengths, N/mm²

Grit blasted steel	>15.0
Polycarbonate	>12.0
Etched aluminium	>11.0
Nitrile rubber	>10.0

Tensile strengths, N/mm²

Grit blasted steel	>18.0
Nitrile rubber	>5.0
Neoprene rubber	>5.0
EPDM rubber	>2.5

Application method

AJETT 501 works best on clean parts – clean surfaces and use sparingly. AJett 501 can be applied direct from its bottle or via appropriate application equipment. Do not return unused product to containers. Fixture time depends on the surface (see above, left). Ensure adequate ventilation.

Solvent resistance

AJETT 501 shows excellent resistance to a variety of oils and chemicals, including motor oil, leaded petrol, ethanol, isopropanol and freons.

Replacement

AJett 501 can be used instead of the following low viscosity cyanoacrylate products:

Holdtite Jetset 41	Loctite 401
Marston Hyloglue SQ	Permabond C792

but cannot be used as a sales specification.

The attention of users should be brought to eventual hazards arising from the use of the product if they differ from what it was originally formulated for.

The customer will agree and accept our general sales and supply condition, in particular the cause of limitation and relief of responsibility.

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