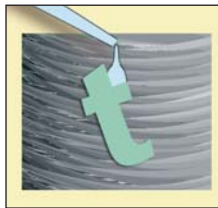


Product data

502

Metal bonder

Cyanoacrylate



General description

Best choice instant adhesive for high speed, high strength bonds between metal parts or metal to plastics and rubbers.

AJETT 502 has high resistance to fatigue, vibrations and organic solvents. It can also be used to bond ceramic and ferrite. It has high shear strength properties.

Benefits

- Fast curing, single component cyanoacrylate.
- Specifically formulated to bond metals to metals as well as to plastics and rubbers.
- High resistance to organic solvents.
- Medium viscosity – but flows easily.
- Cures at room temperature.
- Economical to use – only a few drops are required for an effective bond.
- Good temperature range in service.
- Good tensile shear strength on a variety of materials – see over.
- Handling strength in 5 to 10 seconds, depending on substrate
- Colourless.

- Easy to apply manually or automatically.
- Classified under US Military specification MIL-A-46050C, Type II, Class I

Typical uses – bonding

Metals

- Steel.
- Stainless steel.
- Aluminium.
- Copper.

Metals to other materials

- Rubbers.
- PVC.
- Polycarbonate.
- ABS.
- Ferrite.

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.

Technical data

Composition	Methyl-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

PVC to PVC	3 to 10
SBR to SBR	10 to 15
Copper to copper	10 to 20
Steel to steel	10 to 30
Polycarbonate to polycarbonate	10 to 40
Steel to PVC	15 to 20
Stainless steel to stainless steel	30 to 60
Aluminium to aluminium	40 to 60

Packaging

20 and 50g plastic bottles. Catalogue numbers **502/20** and **502/50**. 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 502* 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 –

Bond strengths, N/mm²

Grit blasted steel	20
Etched aluminium	20
Stainless steel	20
Polycarbonate	10
Copper	13
ABS	5

Application method

AJETT 502 works best on clean parts – clean surfaces and use sparingly. **AJETT 502** 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 502 shows high resistance to a variety of oils and chemicals, including motor oil, leaded petrol, ethanol, isopropanol and freons.

Replacement

AJETT 502 can be used instead of the following low viscosity cyanoacrylate products:

Holdtite CA26
Loctite 496
Permabond C3, 103
Sicomet 45, 85

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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