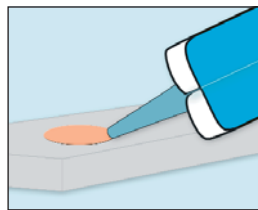


Product data

5300

Rapid cure structural bonder

Methacrylate



General description

A medium viscosity, non-sag, two part structural adhesive that can be used on 'as received' parts.

AJett 5300 has good strength, toughness and surface adhesion for bonding plastics, metals and other materials in any combination.

It is a rapid cure product with a five minute open (or working) time and the ability to withstand thermal cycling and shock loading between dissimilar materials.

Benefits

- Can be used on 'as received' parts – no surface preparation required for most substrates.
- Room temperature curing – no need for heating or UV radiation.
- Excellent gap cure – fills up to 5 mm.
- Excellent adhesion to plastics and metals.
- Ideal for bonding dissimilar materials.
- Will not distort substrates, including aluminium < 3mm thick.
- Excellent resistance in fuel, chemical and water environments.
- 1:1 mixing – cartridges mix as they dispense.
- Solvent free formulation comprising 100% reactive solids for VOC compliance.
- Non-sag formulation – use on vertical surfaces.
- Fast curing – 10 to 12 minutes fixture at 22°C.
- Tough, durable bond; high mechanical strength.
- Temperature resistance of -55 to +120°C.
- Will also withstand 200°C for 15 to 20 minutes.
- Will withstand thermal cycling and shock loadings, even between dissimilar materials.
- Excellent rheology for ease of dispensing and a clean break at the end of a bead.

- No sanding, grinding or primer required.

Typical uses – bonding

- A very wide range of substrates – see over.
- Large panel assembly in automotive, heating/ventilating units, tanks; door and roof panels.
- Signs – ideal for wood to aluminium and plastic to aluminium.
- Bonding kick strips, bumper brackets and aerodynamic parts to main automotive structure
- Plastic light and lens assemblies.
- Stiffening and strengthening reinforced plastic components – baths, cabins, hulls.
- Baffle and pipe installation.
- GRP used for architectural components.

Replaces

- Mechanical fastening systems.
- Brazing and soldering.
- Solvent based adhesives.
- Messy epoxies.
- Liquid primers.

Application

- By hand or automated.
- Pre-measured cartridges automatically mix components.
- Self cures within the joint.

Cost saving

- Low inventory – one grade bonds a wide variety materials.
- Can help to simplify designs, reduce the number of components and speed up production.
- With careful application, no post cure residue to remove, eliminating additional finishing.

Technical data

Composition	Two part (resin/activator) modified acrylic with 100% solids
Physical appearance	Resin and activator: Thick paste. Cured: Solid
Colour	Resin: Straw. Activator: Yellow. Cured: Amber
Odour	Resin: Pungent acrylic. Activator: Pungent. Cured: None
Mix ratio, resin to activator	1:1
Viscosity, spindle 7 at 20 r/min	Resin and activator: 50,000 to 80,000 cPs
Flash point, closed cup	Resin and activator: 10°C. Cured: Not applicable
Temperature range, cured	Continuous: -55 to +120°C. 15 to 20 minutes: 200°C*
Working time	Resin and activator: 5 to 8 minutes after mixing
Handling time	10 to 12 minutes at 22°C
Full cure	4 hours at room temperature
Shore D harness, cured product	75
Gap filling	Up to 5 mm
Elongation	5 to 10%
Peel strength, steel	2.6 to 3.5 N/mm , fully cured performance on 'as received' parts
Tensile strength, steel	26 N/mm² , fully cured performance on 'as received' parts
Tensile strength, aluminium	17 N/mm² , fully cured performance on 'as received' parts
Impact resistance, fibreglass	67 N mm/mm² , fully cured performance on 'as received' parts

*Paint bake cycle

5300 will bond

- Most plain and plated metals, including steel, stainless steel and aluminium.
- A wide range of difficult to bond plastics, including nylons, polystyrenes, ABS and PVC.
- Reinforced plastics and other composites.
- Epoxy coated surfaces, including fibreglass.
- Stone and ceramics.

Solvent resistance

AJETT 5300 exhibits excellent resistance to commonly encountered service environments and chemicals. Depending on the materials being bonded, it will retain bond strength in boiling water, salt water, salt fog, kerosene, petrol, diesel, antifreeze, hydraulic fluids and cutting oils.

It is not recommended for exposure to crude oil, toluene, MEK, acetone, 100% low molecular weight aromatics, aldehydes and ketones.

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 –

Packaging

Pre-measured cartridges 50 and 400 ml.

Bulk 2, 10 or 100 gallons.

Catalogue numbers 5300/C and 5300/B.

Shelf life

6 months at 23°C in normal storage conditions (dry, room temperature) and in closed original packaging or 12 months at 5°C in closed original packaging. Do not freeze.

Application method

AJETT 5300 can be applied either direct from the cartridges (with the aid of a suitable gun and mixer nozzle) or with a spatula or other mechanical means.

Precautions for use

Highly flammable. Irritating to eyes, respiratory system and skin. May cause sensitisation by skin contact. Please refer to the **AJETT** material safety data sheet *MSDS 5300* for other information.

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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