

ALPHA 6010

HIGH PERFORMANCE STRUCTURAL ACRYLIC ADHESIVE



PRODUCT INFORMATION

Alpha 6010 structural acrylic adhesive is a two component, ambient curing adhesive that is ideal for the quick and easy bonding of a range of substrates. It's innovative formulation produces outstanding adhesion and is ideal for use on a variety of materials such as plastics, metals and composites.

KEY INFORMATION

- Fast cure adhesive with rapid strength build up
- Excellent bonding to a wide range of metals and plastics
- Easy to use
- High shear strength
- High impact strength
- Good chemical resistance
- No need for surface primers or conditioners

TYPICAL APPLICATIONS

Alpha 6010 is suitable for the following applications:

- Versatile structural adhesive that bonds a wide variety of substrates
- Bonding metal fasteners to molded composite parts
- Bonding aluminium and stainless steel lettering in sign manufacture
- Bonding automotive carbon fibre body panels
- Bonding GRP in the marine industry
- Bonding dissimilar metals for trailer fabrication

PRODUCT CHARACTERISTICS

The following technical information and data should be considered representative or typical only. Therefore, the information should not be used for specification purposes.

Property	Data
Colour	6010 – A: White / B: Off-white / Mixed: Off-white 6010 Black – A: White / B: Black / Mixed: Black
Consistency	Paste
Specific Gravity (20°C)	A: 0.97 / B: 0.91 / Mixed: 0.94
Viscosity (20°C)	300,000-500,000 cP (Part A, Part B and Mixed)
Mix Ratio	1:1 Part A to Part B
Open Time (20°C)	5-8 minutes*
Cure Time (20°C)	Cure Time: 10-15 minutes* Handling Strength: 30 minutes* Full Cure: 24 hours
Service Temperatures (Cured)	-55°C to 120°C
Coverage (0.2mm bond line)	0.2 – 0.3 square metres per 50ml 1.5 – 2.5 square metres per 400ml

* dependent upon ambient temperature

PRODUCT PERFORMANCE

The performance data presented here has been determined by Alpha Adhesives & Sealants Limited standard test methods and are average values that should not be used for specification purposes. Our recommendations on the use of this product are based on tests believed to be reliable. It is advised that users conduct their own tests to determine the suitability of the product for their specific application.

Test	Substrates	Results/Observations
Lap Shear Test	Steel to steel	30 minutes: >15 N/mm ² 24 hours: >25 N/mm ²
Lap Shear Test	Steel to aluminium	30 minutes: >14 N/mm ² 24 hours: >20 N/mm ²
Lap Shear Test	Steel to GRP	30 minutes: >12 N/mm ² 24 hours: >15 N/mm ²
Lap Shear Test	Aluminium to aluminium	30 minutes: >14 N/mm ² 24 hours: >20 N/mm ²
Lap Shear Test	Aluminium to GRP	30 minutes: >10 N/mm ² 24 hours: >12 N/mm ²
Lap Shear Test	Polycarbonate to Polycarbonate	30 minutes: >3 N/mm ² 24 hours: >5 N/mm ²

HANDLING & APPLICATIONS

The general application information presented here is based upon typical conditions determined by Alpha Adhesives & Sealants Limited testing. Our recommendations on the use of this product are based on methods believed to be reliable. It is advised that users conduct their own tests to determine the suitability of the product for their specific application.

Process Step	Guidelines
Surface Preparation	All surfaces should be cleaned of any dust, grit, loose material, wax, grease and oil using a suitable cleaner such as Alpha T559.
Adhesive Application	<ol style="list-style-type: none">1. Remove the cap from the twin cartridge and attach the supplied mixer nozzle. Place the cartridge within a suitable twin-cartridge dispenser gun.2. Dispense a sufficient amount of adhesive to ensure both components are mixing equally.3. Apply the mixed adhesive on to one of the substrates.4. Assemble the substrates together carefully within the working life (5-8 minutes). Use clamps to hold together if necessary.5. Remove any excess adhesive prior to curing using a suitable cleaner. It is much easier to remove excess while uncured.
Curing	Handling strength is achieved approximately 30 minutes after bonding. Full strength is achieved 24 hours after bonding.
Cleaning	A suitable solvent cleaner such as Alpha T559 should be used to clean uncured adhesive prior to curing. When fully cured, Alpha 6010 will require mechanical abrasion to remove material.

HEALTH & SAFETY INFORMATION

Alpha 6010 Part A and Part B are classified as hazardous according to Directive EC 1272/2008. Please refer to the Alpha 6010 Part A and Part B Safety Data Sheets for further health & safety information.

STORAGE

Alpha 6010 should be stored in its original container, with the syringe cap tightly secured, in dry conditions and at temperatures between 5°C and 25°C. Alpha 6010 will keep satisfactorily for up to 12 months from date of manufacture if stored according to the recommended conditions.

PRODUCT AVAILABILITY

Product Reference	Pack Size	Container	Box Quantity
Alpha 6010	25 ml	Twin Syringe	10
Alpha 6010	50 ml	Twin Syringe	10
Alpha 6010	400 ml	Twin Syringe	10

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