

DESCRIPTION

Bonding of composites, thermoplastics and metals without any primer application.

PROPERTIES

- 2 component room temperature cure methacrylate adhesive
- Non sagging paste product suitable for vertical applications and to fill irregular joints
- Fast setting product adapted to reduce assembly time
- Excellent behaviour at low temperatures
- Excellent mechanical and thermal performances up to 100°C
- Product adapted to assemblies involving dissimilar materials
- Excellent strength to dynamic loads (vibrations and impacts)
- Product adapted to stringent ageing and aggressive environments
- Product adapted to assemblies with less than ideal surface preparation

PHYSICAL PROPERTIES				
Composition	ADHESIVE	ACTIVATOR	MIX	Method
Mix ratio by weight	100	100		
Mix ratio by volume at 25°C	100	100		
Colour	Off white	Off white	Off white	
Viscosity at 24°C, mPa.s	50 000-70 000	30 000-50 000	NA	BROOKFIELD
Density at 25°C	0.98 – 1.02	0.98 – 1.02	0.98 – 1.02	
Open time on 7 mm bead at 23°C, min	-	-	4-7	LT-006-B
Handling time at 23°C, min *	-	-	18-22	LT-006-B

* Handling time is defined as the time needed to obtain Lap Shear Strength on Aluminum at 23°C, of 1MPa.

MECHANICAL PROPERTIES

Tensile strength, MPa	23 – 25	ASTM D638
Elongation at break, %	33 - 37	ASTM D638
Young Modulus, MPa	2000 - 2700	ASTM D638
Working temperature, °C **	-40 to 120	LT-006-B

** Working temperature is defined as the temperature at which product keeps 80% of its initial Lap Shear Strength after 1000 hours ageing at this temperature, value on Aluminium, measured at 23°C.

MECHANICAL PROPERTIES ON ASSEMBLIES (cured 24 hours at 23°C)

Lap Shear Strength				
Aluminium 2017A sandblasted	At 23°C	LT-006-B	MPa	20-29 CF
	After wet cataplasma 7 days at 70°C/100% RH			20-29 CF
Stainless Steel 304 sandblasted	At 23°C			26 CF
Electroalvanized Steel sandblasted	At 23°C			19 CF
	After wet cataplasma 7 days at 70°C/100% RH			19 CF/SCF
Electroalvanized Steel Acetone wipe	At 23°C			22 CF
Polycarbonate	At 23°C			7 SF
ABS	At 23°C			6 SF
PMMA	At 23°C			6 SF
Carbon prepreg Composite	At 23°C			8 SD

CF: Cohesive Failure

SCF: Special Cohesive Failure

SF: Substrate Failure

SD: Substrate Delamination, according to standard ISO 10365.

Floating roller Peel Strength				
Aluminum 2017A sandblasted	At 23°C	ISO 4578	KN/m	9

EQUIPMENT

ADEKIT A 300-1 packaged in 50 ml and 400 ml cartridges requires a manual or pneumatic gun. Please consult our technical department for applications needing a machine.

SUBSTRATE PREPARATION

The item to be bonded must be free of all dirt, oil or other foreign matter. A clean, dry surface is a must. Consult our Technical Support and refer to the technical data sheet about surface preparations to choose adapted degreaser or cleaner

HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products :

- ensure good ventilation,
- wear gloves, safety glasses and waterproof clothes.

For further information, please consult the product safety data sheet.

STORAGE CONDITIONS

Shelf life of ADEKIT A 300-1 is 9 months maximum in its original unopened packaging at a temperature between 15°C and 23°C. An extended exposure to higher temperature than 23°C will reduce product shelf life.

PACKAGING

A300-1 / 50 ml	Box of 10 cartridges
A300-1 / 400 ml	Box of 10 cartridges

GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products, under their own conditions before commencing with the proposed application. AXSON guarantee the conformity of their products with their specifications but cannot guarantee the compatibility of a product with any particular application. AXSON disclaim all responsibility for damage from any incident which results from the use of these products. The responsibility of AXSON is strictly limited to reimbursement or replacement of products which do not comply with the published specifications.