Description

AW 2916 is a two-part acrylic adhesive designed for structural bonding of various substrates.

Features

- Recommended substrates: plastic, metal, ceramic, wood
- Excellent bonding strength (including lap shear, T-peel and impact strength)
- Minimal odor
- Excellent heat resistance (working temperature up to 120°C)
- Fast cure (5-10 mins at 10-28°C)

Uncured Properties

Chemical Type	Modified Acrylate
Appearance Part A Part B	 White Pale Green
Viscosity @ 25°C [mPa.s] Brookfield LVDV, spindle 14# @ 20rpm Part A Part B	 15,000 15,000
Mix Ratio A:B By Volume	 1:1
Specific Gravity [g/cm^3]	~1.0
Shelf Life @ 10-28°C [months]	6

Curing Conditions

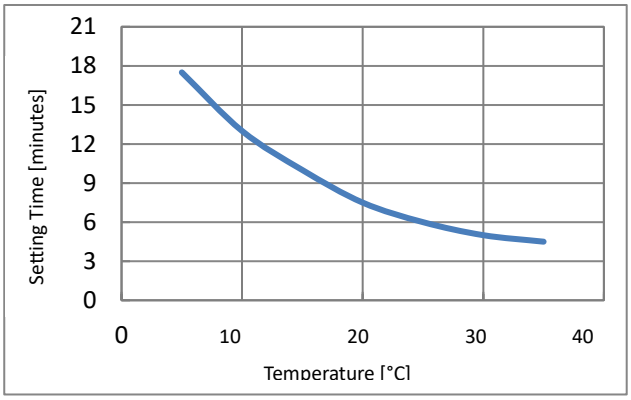
Setting Time @ 10-28°C [mins]	5-10
Fixture Time @ 10-28°C [mins]	10-15
Full Curing @ 10-28°C [hrs]	24

Cured Properties

Hardness [Shore D] ASTM D2240	70
Lap Shear Strength [MPa] ASTM D1002	25
Elongation at Break [%] ASTM D638	25
Tensile Strength [MPa] ASTM D638	18

Setting time vs. various temperatures

Substrate：Aluminum



Shear strength at various substrates

Surface treatment of test substrates:

Metal: sand and wipe with ethyl alcohol.

Plastic: wipe with ethyl alcohol.

Material Categories	Substrates	Shear Strength [MPa]
Metal	Aluminum	25
	Steel	25
	Stainless steel	22
Plastic	ABS	12*
	Polycarbonate	9
	FRP(Polyester)	14*

*Material failure

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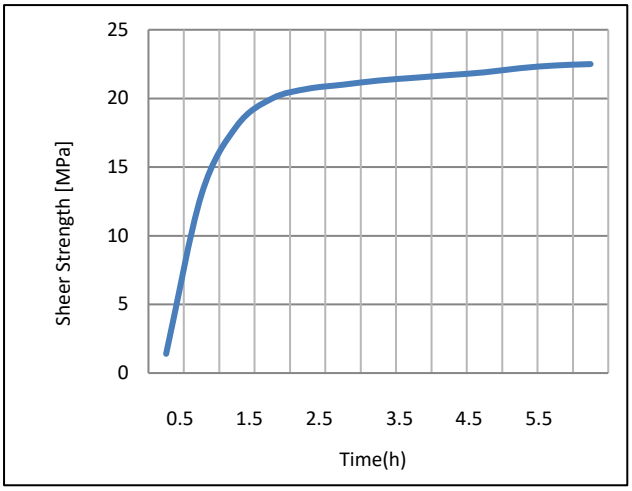
Time to set and shear strength

Bond to aluminum at 25°C and then measure shear strength at specified time after adhesion.

Test substrate：aluminum/aluminum

Surface treatment of test substrates: Sand and wipe with ethyl alcohol.



Directions for Use

1. Remove surface contaminants such as paint, oxide films, oils, dust, mold release agents and any other surface contaminants before bonding.
2. Use gloves to minimize skin contact.
3. Dual cartridges: to start a new cartridge, remove cartridge cap and dispense a small amount of adhesive and make sure both Part A and Part B are extruded. Attach nozzle and dispense approximately 25 to 50mm before bonding. Partially used cartridges can be stored with the mixing nozzle attached. To reuse the cartridges, remove and discard the old nozzle, attach a new nozzle and dispense approximately 25 to 50mm before bonding.
4. Bulk containers: normal material is dispensed through volumetric meter mixing equipment and attached to static mix nozzles.
5. Application on the substrates should be made as soon as possible. Large volume of adhesives or high temperatures will accelerate the curing speed.
6. Join the adhesive coated surfaces with certain pressure. Higher temperatures will speed up the curing.
7. Keep the assembled parts from moving during curing. Prevent any service load before developing full bonding strength.

Uncured adhesive can be cleaned using ethyl alcohol.

Storage

Maximum shelf life may be obtained when product is stored in a cool, dry location at a temperature between **10°C to 28°C**.

TO PREVENT CONTAMINATION OF UNUSED PRODUCT, DO NOT RETURN ANY PRODUCT TO ITS ORIGINAL CONTAINER.

Materials Handling

Refer to the Material Safety Data Sheet (MSDS) for this product.

Disclaimer

The information provided here including the recommendations for use and application of the product is based on internal laboratory test conditions and should only be used as a reference. CollTech does not assume responsibility for the test or performance results obtained by the user. It is the responsibility of the user to perform their own evaluations to confirm whether this product is suitable for their application.