

# AAS 5300

## General Purpose Methacrylate Adhesive

### PRODUCT DESCRIPTION

**AAS 5300** is a 1:1 meter-mix, methacrylate-based structural adhesive designed for general purpose use bonding a wide variety of materials in industrial applications. AAS 5300 forms tough, durable bonds to most plastics, composites, metals, ceramics, and other durable substrates in all combinations without the use of special primers. Surface cleaning or preparation is not required in almost all cases. 5300 is a fast curing product with a 5-10 minute open time and a fixture of 8-14 minutes at room temperature. The cure time was designed for high speed manufacturing processes where fast fixturing is required. 5300 is easily dispensed from packaged cartridges or with commercial dispensing equipment as a non-sag, creamy gel, with no stringing. The product was designed for use with static mixer tubes and the two components have a balanced viscosity for ease of mixing

### PROCESS & PERFORMANCE BENEFITS

<b>Primerless</b> <b>As received bonding</b> <b>Good chemical resistance</b> <b>High impact strength</b>	<b>Room Temperature Cure</b> <b>Convenient 1:1 mix ratio</b> <b>Gap filling to 0.125 inches</b> <b>Fast fixturing</b>
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### UNCURED PROPERTIES

	Part A	Part B
Viscosity, cP (TD, 2.5rpm).....	250,000	250,000
Density (lbs/gal).....	8.05	8.05
Color.....	Off White	Light amber
Flash Point (LCC).....	51°F	51°F
Mix Ratio (wt & volume).....	1 : 1	

### CURING PROPERTIES\*

Mixed Viscosity, cP (TD, 2.5rpm).....	250,000
Mixed Density (lbs/gal).....	8.05
Gel Time.....	5-10 minutes
Fixture Time.....	8-14 minutes

\* Curing properties are highly dependent on the specific application and the materials being bonded. The ranges used here are based on representative examples of typical applications.

## CURED PROPERTIES

Hardness.....	75D
Elongation.....	10%
Operating Temp.....	-60° - 250°F
Color	light amber

This product can go through one paint bake cycle of 375-F for 20 minutes with no significant loss in strength.

## BOND PERFORMANCE (as received surfaces with no preparation)

Tensile shear strength by the ASTM1002 test method

Steel/Steel.....	>4200 psi	Aluminum/Aluminum.....	>3450psi
Fiberglass/Fiberglass.....	Stock Failure	ABS/ABS.....	Stock Failure
PVC/PVC.....	Stock Failure	PMMA/PMMA.....	Stock Failure
SMC/SMC.....	Stock Failure	Gelcoat/Gelcoat.....	Stock Failure
Peel Strength, Steel/Steel(ASTM D1876).....	15-20 pli		
Impact Strength, Auto Side Impact: Steel/Steel.....	>6.78 J, 20-22ft.lbs/in		

## CHEMICAL RESISTANCE

AAS 5300 exhibits excellent resistance to commonly encountered service environments and chemicals. Depending on the materials being bonded, AAS 5300 will retain bond strength in boiling water, salt water, salt fog, kerosene, gasoline, diesel fuel, antifreeze, hydraulic fluids, and cutting oils. Resistance to specific chemicals and environments must be tested.

NOT RECOMMEND FOR EXPOSURE TO: Crude oil, toluene, MEK, Acetone, 100% low molecular weight aromatics, aldehydes, and ketones.

## PACKAGING & SHELF LIFE

The AAS 5300 is available in cartridges, pails, and drums. The material can be used with conventional meter/mix/dispense equipment. All materials should be stored in a cool place when not used for an extended period of time. Shelf life of this product is six (6) months at 23°C when stored in original sealed container, 12 months in cartridges. Do not freeze. Short mixer life is estimated due to fast gel times.

**For technical service, samples, or application assistance, please contact us at**

**Phone: 860-953-4100 or Fax: 860-953-4521**

DISCLAIMER: The information contained in this data sheet is empirical or based on laboratory testing and is not intended for design purposes. Advanced Adhesive Systems, Inc., makes no representations or warranties of any kind concerning these data. Advanced Adhesive Systems, Inc., assumes no responsibility nor liability for results obtained by the end-user where Advanced Adhesive Systems, Inc., has no control over variables of storage, substrates, surface preparation, temperature, handling and application. End-users are solely responsible for making their own tests and evaluation of this product prior to use in their manufacturing process to determine if this product is suitable for the application.

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