



AAS 5310

Metal Bonding Methacrylate Adhesive

PRODUCT DESCRIPTION

AAS 5310 is a 1:1 meter- mix, methacrylate-based, structural adhesive formulated to bond almost all engineered thermoplastics, thermosets, composites and metal structural elements together in any combination. It has excellent adhesion to as-received metal surfaces including aluminum, stainless and plated steels and forms tough, high strength bonds without surface preparation, primers, or chemical wipes. It features a medium cure time for assembly flexibility to allow for positioning and multiple operations but provides for faster fixturing. AAS 5310 has outstanding durability and environmental resistance to many common industrial solvents, fuels, lubricants and environmental conditions. This product is formulated as a non-sag, creamy gel with matched viscosity for both parts, and is easy to dispense through static mixer tubes and other dispensing equipment.

PROCESS & PERFORMANCE BENEFITS

Primerless	Room Temperature Cure
As received bonding	Convenient 1:1 mix ratio
Chemically resistant	Gap filling to 0.125 inches
Bonds diverse substrates	Extended working time

UNCURED PROPERTIES

	Part A	Part B
Viscosity, cps Spindle TD, 2.5rpm).....	200,000	200,000
Density (lbs/gal).....	8.07	8.05
Color.....	Off White	amber
Flash Point (LCC).....	51°F	51°F
Mix Ratio (wt & volume).....	1 : 1	

CURING PROPERTIES*

Mixed Viscosity, cps (#4, 6rpm).....	200,000
Mixed Density (lbs/gal).....	8.05
Working Time.....	8-10 minutes
Fixture Time.....	18-22 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.....	70D
Elongation.....	25%
Operating Temp.....	-40° - 250°F

BOND PERFORMANCE

PPO-HIPS.....	Stock Failure	SMC/SMC.....	Stock Failure
Fiberglass/Fiberglass*.....	Stock Failure	ABS/ABS.....	Stock Failure
PVC/PVC.....	Stock Failure	PMMA/PMMA.....	Stock Failure
Steel/Steel.....	4200 psi	Alum/Aluminum.....	>3300psi
Peel Strength, Steel/Steel(ASTM D1876).....	15-20 pli		
Impact Strength FG/FG, Auto Side Impact.....	>13 J/ in2		

*Fiberglass to gelcoat or gelcoat to gelcoat provides stock failure

CHEMICAL RESISTANCE

AAS 5310 exhibits excellent resistance to commonly encountered service environments and chemicals. Depending on the materials being bonded, AAS 5310 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 5310 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. Shelf life may be extended with refrigeration. Do not freeze.

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.

10/98 AAS5310

Page 2



1-800-375-0605
Option 8 for 24/7 Service



6550 Oley Speaks Way
Canal Winchester, OH 43110



www.rudolphbros.com
rbcsupport@rudbro.com