



Product Description Sheet

AT-1030 Structural Acrylic Adhesive

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Description:

Weld Mount AT-1030 is an Acrylic Based, solvent-free adhesive system that has been used to build advanced fiberglass boats, aluminum automobile chassis, and even carbon fiber airplanes. AT-1030 provides flexibility and toughness when repairing or bonding plastics and metals in almost any combination. This material is completely waterproof can withstand heat cycling and shock loading between dissimilar materials. Although it is always best to clean and prepare surfaces before bonding, AT-1030 will work successfully in many applications without preparation. AT-1030 gives you 6 minutes of open or working time to assemble and line up your parts and begins to set in 12 to 15 minutes. And will fill large gaps between parts successfully.

Physical Properties: (Uncured)

Viscosity @ 25° C (cps)	Mixed	200,000cps
Color:	Off White	Straw
Toxicity	Moderate	see MSDS
Mixed Ratio:	Volume: 1 to 1	Weight: 1 to 1
Specific Gravity	1.01	(20/20°C)
Flashpoint	51° F	(COC method)

Physical Properties: (Cured)

Strength (PSI Steel)	Shear	3,365 PSI
	Tensile	2,500 PSI
Chemical Resistance	Excellent	
Handling Strength	40 Minutes For	75% Overall Strength
Gap Fill	0.375 Inches	
Temperature Range::	-65° F - 250° F	
Elongation	60%	
Impact Resistance	20ftlbs/in ²	

Packaging:

AT-1030 is conveniently packaged in 40 ML plunger cartridges for hand mixing. Special packaging is available on request

Effects Of Temperature:

AT-1030 is best used at temperatures between 65° F and 80° F. Temperatures below 65° F will slow the cure speed of the material and the viscosities will be higher. Temperatures above 80° F will cause the material to cure faster and the viscosities will be lower. For consistent dispensing maintain temperature as listed above.

WHAT AT-1030 BONDS:

METALS:

- ALUMINUM
- STEEL
- STAINLESS STEEL
- COATED METALS

THERMO SETS:

- FIBERGLASS
- PHENOLICS
- GEL COATS
- EPOXY
- RIM URETHANE
- POLYURETHANE
- LIQUID MOLDING RESINS
- SMC

THERMO PLASTICS:

- ACRYLICS
- ABS
- POLYCARBONATES
- NYLONS
- PPO'S
- VINYL'S
- PVC'S
- STYRENE'S
- PEEK'S
- PBT BLENDS
- PET BLENDS

BENEFITS:

- ◆ GAP FILLING TO .375"
- ◆ LITTLE SURFACE PREP
- ◆ EXCELLENT STRENGTH
- ◆ IMPACT RESISTANT
- ◆ 100% REACTIVE
- ◆ ROOM TEMPERATURE CURE
- ◆ EASILY APPLIED

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Storage And Shelf Life:

The shelf life of AT-1030 is 18 months from the date of manufacture which is indicated on the cartridge when refrigerated at 40 degrees F. Shelf life is 12 months from the date of manufacture when the product is stored properly at a temperature no greater than 72° F. Exposure to temperatures above 72 F will reduce the shelf life of the product. AT-1030 should never be frozen.

Precautions:

AT-1030 is flammable. Keep it away from heat, sparks and open flames.

Keep out of reach of children. This product is for industrial use only. Keep containers closed when not in use. Avoid contact with skin and eyes. Harmful if swallowed. Refer to Material Safety Data Sheet (MSDS) for more complete safety information.

Mixing:

Mixing: Proper mixing is required to insure Part A and Part B are mixed thoroughly. The plunger dispenses equal amounts of Part A and Part B to allow for a proper 1 to 1 mixture. Heat buildup during and after mixing is normal. To reduce the likelihood of exothermic reaction or excessive heat buildup, mix less than 100 grams at a time. Mixing smaller amounts will minimize heat buildup.

A resealing cap is provided in the plunger. The product can be reused at a later date by carefully cleaning the discharge points with a clean towel and sealing the discharge ends with the cap. For best results store AT-1030 in a refrigerator where food is not stored.

Bonding:

For optimum bond strength and to insure maximum performance in the finished assembly mate parts together within the specified working time of the adhesive (5—6 Minutes). Make sure the bond joint has uniform coverage and that a sufficient amount of adhesive is in the bond area. It is important to have the adhesive applied, parts aligned and positioned, within the established work time for the product. To ensure maximum performance in the finished assembly parts should remain undisturbed until the joint is sufficiently cured.

For the highest strength bonds surfaces should be clean, dry, and free of contamination. Extensive surface preparation is not required for AT-1030 and good bonds can be formed on most substrates after a solvent wipe. However we recommend that metal surfaces (particularly aluminum) be given a scotchbrite cleaning to remove surface oxidation to achieve the highest bond strengths.

Clean Up:

It is important to remove excess adhesive from the substrate before it is cured. Solvent cleaners such as alcohol or MEK yield good results. Once the adhesive has cured it will be very difficult to remove and may require as much as 350° F to soften to allow removal.

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Associated Technologies specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Associated Technologies products. Associated Technologies specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.