



AC-[®]236 Class A Fuel Tank and Fuselage Sealant

SIN #834-100

Description

AC-[®]236 Class A is a brushable, two-component, liquid polysulfide polymer system providing excellent fuel tank and fuselage seals. It has outstanding resistance to aviation gasoline and jet fuel, as well as resistance to chemicals and petroleum products common to the aircraft industry. AC-236 Class A maintains its flexibility and bond strength on most metal substrates like aluminum, stainless steel, steel, and many coatings under extremes of temperature, weathering and stress. The mixed compound is a pourable liquid easily applied by brush. It has excellent tooling properties.

Applications

- Sealing integral fuel tanks
- Repairing integral fuel tanks
- Sealing fuselages

Specifications

AMS-S-8802 - Qualified
LES 1039 BU - Qualified
BS 4657 - Qualified
BS 25146 - Qualified

Typical Physical and Application Properties

Color	
Base:	White
Accelerator:	Black
Mix Ratio	100 base/10 accelerator (by weight)
Nonvolatile Content	87%
Base Viscosity (RVF Brookfield #6 spindle @ 10 rpm, 77°F)	300 poise

Application Life and Cure Time

(@ 75°F, 50% Relative Humidity)

	Minimum Application Life ¹	Typical Tack- Free Time ²	Typical Cure Time ³
A-1/2	1/2 hour	7 hours	24 hours
A-2	2 hours	24 hours	48 hours

Typical Physical and Performance Properties of Cured Compound After 14 Days @ 77°F/50% RH (when tested per AMS-S-8802)

Color	Gray
Specific Gravity	1.64
Hardness	60 Shore "A"
Low Temperature Flexibility	No cracking, checking or adhesion loss when tested at -65°F (-54°C)
Service Temperatures	-65° to +250°F (-55° to +121°C)
Thermal Rupture Resistance	Retains pressure of 10 psi at 250°F with negligible deformation
Corrosion	None.
Repairability	40 piw to itself and other MIL-S-8802 qualified sealants No cracking when bent 180° over a 1/8 inch mandrel. No more than 6% loss of the sealant compound after fluid immersion
Weight Loss and Flexibility	

¹Application life refers to the length of time that mixed compound remains at a consistency suitable for application with brush. Application life is always measured at a standard temperature of 77°F with a relative humidity level of 50%. In general, for every 20°F rise in temperature, the application life is halved; and for every 20°F drop, it is doubled. High humidity levels during the mixing process will shorten application life.

²Tack-free time is the length of time after which a mixed sealant will no longer tightly adhere to L-LP-690 standard low density polyethylene film.

³Cure time is defined as the length of time it takes AC-236 Class A sealant to reach 30A hardness. It depends on three factors: remaining application life, temperature and relative humidity. To a certain extent, the temperature/humidity factors for application life also apply to curing. To accelerate the curing process, apply heat up to (but not more than) 120°F.



Typical Values of AC-236 Class A to AMS-S-8802

Peel Strength**

Substrate	Conditioning	Average Peak Load /% Cohesion
MIL-S-5059	7 days @ 140°F in JRF	53 lbs./100%
	7 days @ 140°F in JRF/SW	63 lbs./100%
MIL-C-27725	7 days @ 140°F in JRF	53 lbs./100%
	7 days @ 140°F in JRF/SW	63 lbs./100%
MIL-P-23377	7 days @ 140°F in DI Water	63 lbs./100%
	7 days @ 140°F in Salt Water	63 lbs./100%

** Specification requirement - 20 lbs./100%, wire mesh

Mixing Instructions

Two-Part Sealant Cartridges:

1. Holding the cartridge, grasp the dasher rod and pull back approximately one inch.
2. Insert the ramrod into the hollow of the dasher rod, break the piston loose, and inject about 1/3 of the contents into the cartridge.

Note: Do not inject all of catalyst in one location. Distribute evenly throughout base material.

3. Repeat steps 2 and 3 until all the contents of the rod are emptied into the cartridge. Remove the ramrod.
4. Mix for the required number of strokes (hand mixing) or for the required amount of time (machine mixing) indicated in the kit instructions.
5. When mixing is complete, remove bottom cap.

6. Pull the dasher rod back to the neck of the cartridge, grasp the cartridge firmly at the neck, unscrew the dasher rod and remove.
7. Screw the nozzle into the cartridge, insert into the extrusion gun and use as required. For hand extrusion, press the used dasher rod against the plunger to force the material from the cartridge.

Storage

The shelf life of AC-[®]236 Class A is 9 months from date of packaging, when stored at temperatures below 80°F in its original container.

Mixed AC-[®]236 Class A may be stored under refrigeration as follows:

15 days at -10°F
30 days at -40°F

It is important to remember that freezing, storing and thawing procedures reduce application life. Also, frozen storage will reduce application life by varying amounts depending on the storage temperature and length of storage time. All aspects of storage, freezing and thawing should be planned carefully and it is not recommended to mix and freeze with less than 1/2-hour application time.

Health and Safety Precautions

AC-[®]236 Class A sealant is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Material Safety Data Sheet (MSDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An MSDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure

All values are typical and are not intended for specification use.

AC-236A-01/09

AC- and AC TECH are trademarks of Advanced Chemistry & Technology, Inc. registered with the US Patent and Trademark Office
US Patent 6,486,268

Seller and manufacturer make no warranty, express or implied, concerning this product, or its merchantability or fitness for any purpose, except that the product conforms to manufacturer's product specifications during its applicable shelf life. User shall determine the suitability of this product for the intended purpose and method of application. Seller and manufacturer's only obligation shall be to replace the quantity of the product proved to be defective. AC TECH shall not be liable for damages in excess of the purchase price of this product.

Advanced Chemistry & Technology, Inc

7341 Anaconda Avenue Garden Grove, CA 92841 T: 714.373.2837 F: 714.373.1913

Page 2 of 2