



# AC-<sup>®</sup>236 Class C Fuel Tank and Fuselage Sealant

SIN #834-100

## Description

AC-<sup>®</sup>236 Class C is a two-component, manganese dioxide cured, 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-<sup>®</sup>236 Class C 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 flowable, faying surface grade material easily applied by brush, roller, spatula or extrusion gun. It has excellent tooling properties.

## Applications

- faying surface sealing
- integral fuel tank sealing
- integral fuel tank repair
- fuselage sealing

## Specifications

AMS-S-8802 - Qualified (C-20, C-80)  
BS 25146 - Qualified (C-20, C-48)  
NA-66-1032 - Qualified (C-20, C-80)

## Typical Physical and Application Properties

Color	
Base:	White
Accelerator:	Black
Mix Ratio	100 base/10 accelerator (by weight)
Nonvolatile Content	93%
Base Viscosity (RVF Brookfield #7 spindle @ 2rpm, 77°F)	2000 poise
Accelerator Viscosity (RVF Brookfield #7 spindle @ 10rpm, 77°F)	700-1600 poise

## Assembly Time and Tack-Free Time (@ 75°F, 50% Relative Humidity)

	Minimum Assembly Time <sup>1</sup>	Typical Tack Free Time <sup>2</sup>
C-20	20 hours	60 hours
C-80	80 hours	96 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 Service Temperatures	No cracking, checking or adhesion loss when tested at -65°F (-54°C)
Thermal Rupture Resistance	-65° to +250°F (-54 to +121°C)
Shear Strength	Does not blister or sponge.
Corrosion	285 psi
Fuel Resistance	None.
Resistance to Other Fluids	70 days at 140°F, 35 piw/100% cohesive failure.
	No cracking when bent 180° over a 1/8 inch mandrel. No more than 6% loss of the sealant compound after fluid immersion

<sup>1</sup>Assembly time refers to the length of time the mixed compound remains at a consistency suitable for assembly and squeeze out. Assembly time is always calculated for a standard temperature of 77°F with a relative humidity level of 50%. In general, for every 20°F rise in temperature, the assembly time is halved; and for every 20°F drop, it is doubled. High humidity levels during the mixing process will shorten assembly time.

<sup>2</sup>Tack-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.

## Typical Values of AC-236 Class C to AMS-S-8802 Peel Strength\*\*

Substrate	Conditioning	Peak Load /%Cohesion
MIL-C-5541	7 days @ 140°F in JRF	35lbs./100%
	7 days @ 140°F in JRF/SW	45lbs./100%
MIL-C-27725	7 days @ 140°F in JRF	35 lbs./100%
	7 days @ 140°F in JRF/SW	45 lbs./100%
MIL-P-23377	7 days @ 140°F in DI Water	45 lbs./100%
	7 days @ 140°F in Salt Water	45 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-<sup>®</sup>236 Class C is 9 months from date of packaging, when stored at temperatures below 80°F in its original container.

Mixed AC-<sup>®</sup>236 Class C 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 ½ hour application time.

### Health and Safety Precautions

AC-<sup>®</sup>236 Class C 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.

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