



AC[®]-350 Class A Intermediate Density Fuel Tank and Fuselage Sealant (Non Micro Balloon Filled) SIN #834-100

Description

AC[®]-350 Class A is a fast cure, intermediate density two-component, manganese dioxide cure, brushable, polysulfide fuel tank and fuselage sealant. AC[®]-350 has outstanding resistance to aviation gasoline and jet fuel, as well as resistance to chemicals and petroleum products common to the aircraft industry. AC[®]-350 Class A maintains its flexibility and bond strength on most metal substrates such as; aluminum, titanium, steel, stainless steel, and many coatings under extremes of temperature, weathering and stress. The mixed compound is a pourable liquid easily applied by brush or roller. It has excellent tooling properties.

Applications

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

Specifications

MMS-332	Qualified
AMS-S-8802	Meets Requirements
AMS-3276	Meets Requirements

Typical Physical and Application Properties

Color	
Base:	White
Accelerator:	Black
Mix Ratio	100 base/10 accelerator (By weight)
Non-Volatile Content	88%
Base Viscosity (RVF Brookfield #6 spindle @ 10 rpm, 77°F)	300 – 450 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	3 hours	3 hours
A-1	1 hours	5 hours	7 hours
A-2	2 hours	8 hours	12 hours

Typical Physical and Performance Properties of Cured Compound After 14 Days @ 77°F/50% RH*

Color	Light Gray
Specific Gravity	1.4
Hardness	48-53 Shore "A"
Low Temperature Flexibility	No cracking, checking or adhesion loss when tested at -65°F (-54°C)
Service Temperatures	-65° to +360°F (-55° to +182°C)
Thermal Rupture Resistance	Conforms
Corrosion	None
Repairability	35 piw / 100% cohesive failure

¹Application life refers to the length of time that mixed compound remains at a consistency suitable for application with brush or roller. Application life is always measured at a standard temperature of 77°F with a relative humidity level of 50%. In general, for every 20° rise in temperature, the application life is halved; for every 20° 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 LP-P-690 low density polyethylene film.

³Cure time is defined as the length of time it takes AC[®]-350 sealant to reach 30A hardness. It depends on three factors: remaining application life, temperature, and relative humidity. The temperature/humidity factors for application life also apply to curing. To accelerate the curing process, apply heat up to (but not more than) 140°F.

Typical Values of AC[®]-350 Class A

Tensile Strength and % Elongation

Conditioning	Requirement	Results
Standard Cure	250 psi/250%	400 psi/350%
14 days JRF 140°F	150 psi/200%	230 psi/340%
8 hours 360°F	200 psi./ 75%	350 psi/100%
72 hrs in JRF 140°F, + 72 hrs 120°F Air Drying + 7 days + 250°F	200 psi/100%	320 psi/150%
Standard Heat Cycle + JRF 7 days 140°F	100 psi./ 50%	350 psi./ 80%

Peel Strength**

Substrate	Conditioning	Load/% Cohesion
AMS 4049	7 days @ 140°F in JRF	32lbs./100%
	7 days @ 140°F in JRF/NaCl	32lbs./100%
MIL-C-27725	7 days @ 140°F in JRF	33lbs./100%
	7 days @ 140°F in JRF/NaCl	33lbs./100%
	70 days @ 140°F in JRF	37lbs./100%
	70 days @ 140°F in JRF/NaCl	37lbs./100%
MIL-P-23377	7 days @ 140°F in NaCl	37lbs./100%

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

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[®]-350 Class A is 9 months from date of packaging, when stored at temperatures below 80°F in its original unopened container.

Mixed AC[®]-350 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 ½ hour of available application time.

Health and Safety Precautions

AC[®]-350 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[®]-350A-01/08

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US Patent 6,486,268

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