



AC-[®]350 Class B Intermediate Density Fuel Tank and Fuselage Sealant (Quick Cure)

(Does not contain microballoons)

SIN #834-100

Description

AC-[®]350 Class B is a fast cure, intermediate density polysulfide sealant suitable for fuel tank and fuselage applications. This two-component, manganese dioxide cured sealant is solvent free and 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 B maintains its flexibility and bond strength on most metal substrates such as; aluminum, titanium, steel, stainless steel, glass, and many coatings under extremes of temperature, weathering and stress. The mixed compound is a thixotropic paste easily applied by extrusion, injection gun or spatula, and exhibits superb tooling properties.

Applications

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

Specifications

AMS-S-8802	B-1/2, B-2, B-4 Qualified
MMS-332	Qualified Grade 2
AMS 3276	B-1/4, B-1/2, B-2, B-4, B-6, B-12 Qualified

Typical Physical and Application Properties

Color	
Base:	Off White
Accelerator:	Brown
Mix Ratio	100 base/10 catalyst
B-1/4	100 base/12.5 catalyst (By weight)
Non-Volatile Content	98%
Base Viscosity (RVF Brookfield #7 spindle @ 2rpm, 77°F)	9,000-12,000 poise

Application Life and Cure Time

(@ 75°F, 50% Relative Humidity)

	Minimum Application Life ¹	Typical Tack-Free Time ²	Typical Cure Time ³
B-1/4	15 minutes	1 – 2 hour	1 – 2 hours
B-1/2	30 minutes	2 – 3 hours	2 – 3 hours
B-2	2 hours	7 – 8 hours	7 – 8 hours
B-4	4 hours	32 – 36 hours	32 – 36 hours
B-6	6 hours	36 – 40 hours	36 – 40 hours
B-12	12 hours	96 hours	96 hours

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

Color	Dark Gray
Specific Gravity	1.40 max
Hardness	50-55 Shore "A"
Low Temperature Flexibility	No cracking, checking or adhesion loss when tested at -65°F (-54°C)
Weight Loss in JRF	3 – 4%
Service Temperatures	-65 to +360°F (-55 to +182°C)
Thermal Rupture Resistance	Conforms
Corrosion	None
Repairability	45 piw / 100% cohesive failure
Crazing	No effect on acrylic or polycarbonate

¹Application life refers to the length of time that mixed compound remains at a consistency suitable for application with spatula or caulking gun. 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 L-LP-690 standard 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. To a certain extent, the temperature/humidity factors for application life also apply to curing. To accelerate the curing process, heat may be applied up to (but not more than) 140°F.



Typical Values of AC-350 Class B

Tensile Strength and % Elongation

Conditioning	Specification Requirements	Results
Standard Cure--14 days	250 psi/250%	260 psi/500%
JRF--14 days @ 140°F	150 psi/200%	200 psi/540%
7 days @ 250°F	125 psi/100%	370 psi/125%
8 hours @ 360°F	200 psi/ 75%	330 psi/100%
24 hrs @ 250°F and JRF - 7 days @ 140°F	100psi/150%	240 psi/260%
Standard Heat Cycle plus JRF – 12 days @ 140°F, 60 hours at 160°F, 6 hours at 180°F plus 24 hours at 120°F Dry	100 psi/ 25%	219 psi/ 42%

Peel Strength

Substrate	Conditioning	Load / % Cohesion
MIL-C-5541	7 days @ 140°F in JRF	60lbs./100%
Alodine	7 days @ 140°F in JRF/SW	65lbs./100%
AMS 2471	7 days @ 140°F in JRF	60lbs./100%
Anodized	7 days @ 140°F in JRF/SW	65lbs./100%
MIL-C-27725	7 days @ 140°F in JRF	62lbs./100%
	7 days @ 140°F in JRF/SW	70lbs./100%
MIL-P-23377	7 days @ 140°F in DI Water	80lbs./100%
RT Cure	7 days @ 140°F in SW	75lbs./100%
AMS 4911	7 days @ 140°F in JRF	65lbs./100%
Titanium	7 days @ 140°F in JRF/SW	70lbs./100%
Stainless Steel	7 days @ 140°F in JRF	60lbs./100%
	7 days @ 140°F in JRF/SW	70lbs./100%
MIL-PRF-85582	7 days @ 140°F in JRF	38lbs./100%
	7 days @ 140°F in JRF/SW	48lbs./100%

Storage

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

Mixed AC-[®]350 Class B 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 B 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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