



AC-[®]730 Class B Non-Chromated Corrosion Inhibiting Sealant

SIN #834-100

Description

AC-[®]730 Class B is a fast cure, two-part, manganese-cured, non-chromated corrosion inhibiting sealant. This sealant provides an effective barrier against the common causes of corrosion on aluminum and between dissimilar metals. AC-[®]730 Class B has outstanding resistance to aviation gasoline and jet fuel, as well as resistance to chemicals, hydraulic fluids and petroleum products common to the aircraft industry. The mixed compound is a thixotropic paste, easily applied by spatula, extrusion gun or injection gun. It maintains its flexibility and bond strength on most metal substrates under extremes of temperature, weathering and stress.

Applications

- Seals faying surfaces of mating parts
- Seals joints from passage of liquid or air
- Prevents corrosion and channeling leakage

Specifications

AMS-3265 – Qualified (B-1/2, B-2)
FMS-3104 – Qualified (B-1/2, B-2, B-6)
LMA MU006 – Qualified (B-1/2, B-2, B-6)
DPM 5896-2 – Qualified (B-1/2, B-1, B-2)
MIL-S-8802 – Meets Requirements

Typical Physical and Application Properties

Color	
Base:	Off White
Accelerator:	Black
Mixing Ratio	100 base/10 accelerator (by weight)
Nonvolatile Content	98%
Base Viscosity (RVF Brookfield #7 spindle @ 2 rpm, 77°F)	9,500 to 14,000 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-1/2	1/2 hour	4 hours	6 hours
B-2	2 hours	16 hours	24 hours
B-6	6 hours	48 hours	72 hours

Typical Physical and Performance Properties of Cured Compound

Color	Black
Specific Gravity	1.54
Hardness	50 Shore A
Low Temperature Flexibility	No cracking, checking or adhesion loss when tested at -65°F (-54°C)
Thermal Stability 48 hrs @ 200°F	Does not soften, blister, crack or blow
Service Temperatures	-65° to +360°F (-54° to +182°C)
Tensile Strength	370 psi
Ultimate Elongation	350%
Corrosion	Excellent protection from corrosion caused by galvanic coupling of dissimilar metals
Repairability AMS 3265 qualified sealants	40 piw to itself and other
Fungus Resistance	Non-nutrient

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; and 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-730 Class B 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. High humidity will speed up the tack free and cure. To accelerate the curing process, apply heat up to (but not more than) 120°F.



Tensile Strength and % Elongation

Tested per AMS3265

Conditioning	Specification Requirements	Results
Standard Cure--14 days	200 psi, 200%	370 psi, 360%
JRF—12 days @ 140°F	200 psi, 200%	230 psi, 390%
JRF—12 days @ 140°F, 60 hrs @ 160°F, 6 hrs @ 180°F	125 psi, 100%	310 psi, 180%
JRF—12 days @ 140°F, 60 hrs @ 160°F, 6 hrs @ 180°F + Heat Cycle	125 psi, 25%	250 psi, 71%
Heat Cycle – 6 cycles of (4 hrs @ 250°F, 40 min @ 320°F, and 1 hr @ 360°F	200 psi, 100%	228 psi, 100%

Peel Strength

Substrate	Conditioning	Results
MIL-C-5541	7 days @ 140°F in JRF	68 lbs./100%
	7 days @ 140°F in JRF/SW	56 lbs./100%
MIL-C-27725	7 days @ 140°F in JRF	58 lbs./100%
	7 days @ 140°F in JRF/SW	66 lbs./100%
MIL-P-23377	7 days @ 140°F in DI WATER	42 lbs./100%
	7 days @ 140°F in SW	44 lbs./100%
Stainless Steel	7 days @ 140°F in JRF	64 lbs /100%
	7 days @ 140°F in JRF/SW	70 lbs /100%
Alclad	7 days @ 140°F in JRF	63 lbs /100%
	7 days @ 140°F in JRF/SW	56 lbs /100%
Alodine	7 days @ 140°F in JRF	64 lbs /100%
	7 days @ 140°F in JRF/SW	59 lbs /100%
Titanium	7 days @ 140°F in JRF	59 lbs /100%
	7 days @ 140°F in JRF/SW	70 lbs /100%

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.

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

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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.

Pre-Mixed and Frozen

Mixed AC-[®]730 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 application time.

Storage

The shelf life of AC-[®]730 Class B sealant is at least 9 months from date of packaging, when stored at temperatures below 80°F in its original container.

Health and Safety Precautions

AC-[®]730 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.