



# Advanced Chemistry & Technology

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## AC-<sup>®</sup> 730 Class C Non-Chromated Corrosion Inhibiting Sealant

SIN #834-100

### Description

AC-<sup>®</sup>730 Class C is a 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 C 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 flowable, faying surface grade material, easily applied by spatula, brush, roller or extrusion gun. It maintains its flexibility and bond strength on most metal substrates under extremes of temperature, weathering and stress.

### Applications

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

### Specifications

AMS-3265 - Meets Requirements

DMS-2013 - Meets Requirements

### Typical Physical and Application Properties

Color	
Base:	Beige (White)
Accelerator:	Black
Mixing Ratio	100 base/10 accelerator (by weight)
Nonvolatile Content	94%
Base Viscosity (RVF Brookfield #6 spindle @ 2 rpm, 77°F)	1,700 poise

### Application Life and Cure Time (@ 75°F, 50% Relative Humidity)

	Minimum Application Life <sup>1</sup>	Typical Assembly Time <sup>2</sup>	Typical Cure Time <sup>3</sup>
C-8(24)	8 hours	24 hours	7 days
C-48(168)	48 hours	168 hours	6 weeks

### Typical Physical and Performance Properties of Cured Compound when tested in accordance with AMS3265

Color	Dark Gray
Specific Gravity	1.49
Low Temperature Flexibility	No cracking, checking or adhesion loss when tested at -65°F (-54°C)
Service Temperatures	-65° to +360°F (-54° to +180°C)
Elongation	500%
Corrosion	No softening, sponging, or loss of adhesion; no evidence of corrosion of metal under sealant.
Repairability	20 piw to itself and other AMS3265 and AMS-S-8802 sealants
Fungus Resistance	Non-nutrient

<sup>1</sup>Application life refers to the length of time the 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°F 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.

<sup>2</sup>Assembly time is the length of time after which a mixed sealant will squeeze out from between faying surfaces.

<sup>3</sup>Cure time is defined as the length of time it takes AC-730 Class C 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) 158°F.

## Typical Values for AC-<sup>®</sup> 730 Class C

### Peel Strength

Substrate	Conditioning	Load/% Cohesion
MIL-C-5541	7 days @ 140°F in JRF	34 lbs./100%
	7 days @ 140°F in 3% NaCl	28 lbs./100%
AMS2471	7 days @ 140°F in JRF	42 lbs./100%
	7 days @ 140°F in 3% NaCl	34 lbs./100%
AMS5516	7 days @ 140°F in JRF	37 lbs./100%
	7 days @ 140°F in 3% NaCl	27 lbs./100%
AMS4911	7 days @ 140°F in JRF	30 lbs./100%
	7 days @ 140°F in 3% NaCl	34 lbs./100%
MIL-C-27725	7 days @ 140°F in JRF	31 lbs./100%
	7 days @ 140°F in 3% NaCl	31 lbs./100%
MIL-PRF-23377 RT, 200°	7 days @ 140°F in 3% NaCl	40 lbs./100%
	7 days @ 140°F in 3% NaCl	32 lbs./100%
Graphite/Epoxy	7 days @ 140°F in JRF	37 lbs./100%
	7 days @ 140°F in 3% NaCl	32 lbs./100%
DMS 1850C	None	78lbs./100%
	7 days @ 140°F in JRF	27lbs./100%
	7 days @ 140°F in JRF/SW	36lbs./100%
	3% Salt Water	40lbs./100%
DMS 2433	None	76lbs./100%
	7 days @ 140°F in JRF	26lbs./100%
	7 days @ 140°F in JRF/SW	32lbs./100%
	3% Salt Water	40lbs./100%
DMS 1786D	None	75lbs./100%
	7 days @ 140°F in JRF	26lbs./100%
	7 days @ 140°F in JRF/SW	38lbs./100%
	3% Salt Water	38lbs./100%

Tested per AMS3265 and DMS 2013

### 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*

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

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US Patent 6,486,268

**AC-730C-01/08**

*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.*

*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>730 Class C sealant is at least 9 months from date of packaging, when stored at temperatures below 80°F in its original container.

Mixed AC-730 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>730 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.