



# AC-® 632 Class B Aerodynamic Smoothing Compound

SIN #834-100

## Description

AC-632 Class B, is a two-part, manganese cured, polysulfide sealing compound, for aerodynamic smoothing. The mixture of base and catalyst is a thixotropic paste, which can be applied with a spatula, extrusion gun, or injection gun. The cured AC-632 sealant is a firm, flexible rubber, aluminum in color, resistant to fuel and other chemicals and lubricants common to the aircraft industry. AC-632 maintains its flexibility and bond strength on most metal substrates under extremes of temperature, weathering and stress.

## Applications

- aerodynamic smoothing
- weather seal

## Specifications

DMS 1819 - Qualified (B-2)  
NA-66-1032 (B-2)

## Typical Physical and Application Properties

Color	
Base:	Aluminum
Accelerator:	Black
Mix Ratio	100 base/10 accelerator (by weight)
Nonvolatile Content	96%
Base Viscosity (RVF Brookfield #7 spindle @ 2rpm, 77°F)	6,000-12,000 poise

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

	Minimum Application Life <sup>1</sup>	Typical Tack-Free Time <sup>2</sup>	Typical Cure Time <sup>3</sup>
B-2	2 hours	20 hours	24 hours

## Typical Physical and Performance Properties of Cured Compound After 14 Days @ 77°F/50% when tested per DMS 1819

Color	Aluminum
Specific Gravity	1.55
Hardness	60 Shore "A"
Flow @ 90 minutes	0.12 inch
Low Temperature Flexibility	No cracking, checking or adhesion loss when tested at - 65°F (-54°C)
Service Temperatures	-65° to +250°F (-55° to +121°C)
Corrosion	No evidence of corrosion

<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 and a relative humidity level of 50%. In general, for every 20°F rise in temperature, the application life is halved; and for every 20°F drop, it is doubled. High humidity levels during the mixing process will shorten application life.

<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

<sup>3</sup>Cure time is defined as the length of time it takes AC-632 Class B 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) 120°F.

## Typical Values of AC-632 Class B

### Peel Strength (per DMS 1819)\*

Substrate	Load/% Cohesion
Anodized Aluminum	20 piw/100%
DMS 1786 D	20 piw/100%
DMS 2433 C	20 piw/100%

\*Requirements: >15 piw/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.
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 a 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

Mixed AC-632 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-®632 Class B Aerodynamic Smoothing Compound 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-632B-01/08**

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