



# AC-<sup>®</sup>360 Class B

## Intermediate Density Fuel Tank and Fuselage Sealant (Quick Cure)

(Non-Micro Balloon Filled)

SIN #834-100

### Description

AC-<sup>®</sup>360 Class B is a fast cure, intermediate density two-component, manganese dioxide cure, polysulfide fuel tank and fuselage sealant. AC-<sup>®</sup>360 has outstanding resistance to aviation gasoline and jet fuel, as well as resistance to chemicals and petroleum products common to the aircraft industry. AC-<sup>®</sup>360 Class B 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 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

DPM-6528  
AMS-3276 – Meets Requirements  
AMS-S-8802 – Meets Requirements

### Typical Physical and Application Properties

|   |  |
|---|--|
| Color Base:   | Off White                              |
| Accelerator:  | Brown                                  |
| Mix Ratio   | 100 base/10 accelerator<br>(By weight) |
| Non-Volatile Content  | 98%                                    |
| Base Viscosity<br>(RVF Brookfield #7 spindle<br>@ 2rpm, 77°F) | 7,500-11,000 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-1/2 | 1/2 Hour                              | 2-3 hours                           | 2-3 hours                      |
| B-2   | 2 hours                               | 8 hours                             | 8 hours                        |

### Typical Physical and Performance Properties of Cured Compound After 7 Days @ 77°F/50% RH\*

|                             |   |
|-----------------------------|---|
| Color                       | Dark Brown  |
| 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) |
| Service Temperatures        | -65° to +360°F (-55° to +182°C)                                     |
| Weight Loss in JRF          | 5.22%   |
| Thermal Rupture Resistance  | Conforms  |
| Corrosion                   | None  |
| Repairability               | 45 piw / 100% cohesive failure                                      |

<sup>1</sup>Application 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°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-360 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-<sup>®</sup>360 Class B

### Tensile Strength and % Elongation

| Conditioning              | Specification Requirements | Results      |
|---------------------------|----------------------------|--------------|
| Standard Cure             | 200 psi/200%               | 274 psi/550% |
| +7 days JRF               | 125 psi/150%               | 300 psi/780% |
| +7 days in BMS 3-11 ty IV | 60 psi/200%                | 160 psi/800% |

### Peel Strength

| Substrate                 | Conditioning              | Load/% Cohesion |
|---------------------------|---------------------------|-----------------|
| MIL-C-5541                | 7 days @ 140°F in JRF     | 64 lbs./100%    |
|                           | 7 days @ 140°F in 3% NaCl | 74 lbs./100%    |
| MIL-A-8625 Ty. I          | 7 days @ 140°F in JRF     | 60 lbs./100%    |
|                           | 7 days @ 140°F in 3% NaCl | 65 lbs./100%    |
| MIL-S-5059 (302)          | 7 days @ 140°F in JRF     | 55 lbs./100%    |
|                           | 7 days @ 140°F in 3% NaCl | 58 lbs./100%    |
| MIL-S-9046 Ty. I, Comp. B | 7 days @ 140°F in JRF     | 66 lbs./100%    |
|                           | 7 days @ 140°F in 3% NaCl | 70 lbs./100%    |
| BMS 10-20 Ty. II, Grade A | 7 days @ 140°F in JRF     | 65 lbs./100%    |
|                           | 7 days @ 140°F in 3% NaCl | 70 lbs./100%    |
| BMS 10-11 Ty. I, Grade A  | 7 days @ 140°F in JRF     | 70 lbs./100%    |
|                           | 7 days @ 140°F in 3% NaCl | 65 lbs./100%    |
| BMS 10-11 Ty. I, Grade E  | 7 days @ 140°F in JRF     | 59 lbs./100%    |
|                           | 7 days @ 140°F in 3% NaCl | 72 lbs./100%    |
| DMS-1786                  | No immersion              | 48 lbs./100%    |
| DMS-1850                  | No immersion              | 45 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.
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>360 Class B is 6 months from date of packaging, when stored at temperatures below 80°F in its original unopened container.

Mixed AC-<sup>®</sup>360 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-<sup>®</sup>360 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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**AC-360B-01/08**

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