

## 09Y002 Polyurethane Primer

### Product description

09Y002 is a two-component, high solids, chromated, elastomeric polyurethane primer.

- Corrosion inhibiting
- Resistant to immersion in water, jet fuels, engine oils, hydraulic and de-icing fluids
- Exhibits 60% minimum elongation at ambient conditions as well as flexibility at low ( $-65^{\circ} \pm 5^{\circ}\text{F}$ ) and high ( $350^{\circ} \pm 5^{\circ}\text{F}$ ) temperatures

### Components



#### Mix ratio (by volume):

- 09Y002 (base component) 1 part
- 09Y002CAT (activator component) 1 part

### Specifications



09Y002 polyurethane primer is qualified to:

- A88TB0106
- FMS 3035 Type II Class 1
- LMA-MR035 Class A Type II

*Note: PPG Aerospace recommends you check the most recent specification QPLs for updated information.*

09Y002 polyurethane primer meets the performance requirements of:

- TT-P-2760A Type I Class C

#### Product compatibility:

09Y002 polyurethane primers compatible with the following topcoat specifications:

- DMS 2115
- MMS-420
- MIL-PRF-85285

### Surface preparation and pretreatments



09Y002 polyurethane primer can be applied over clean, dry, intact aluminum and composite surfaces. Aluminum surfaces shall be treated with materials conforming to MIL-C-5541 or equivalent

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## Instructions for use



### **Mixing instructions:**

Stir or shake the base component to ensure any pigment, which may have settled on the bottom of the can, has been fully incorporated into the base. If using a mechanical paint shaker, do not shake the base component longer than 5 minutes. Pour the entire contents of base component into a separate clean container. Slowly add the entire contents of the catalyst component to the base component. Mix by hand stirring, paint shaker or mechanical mixing to ensure the base/catalyst mixture is homogeneous. **DO NOT SHAKE OR MECHANICALLY MIX MATERIAL FOR LONGER THAN 15 MINUTES.**

*Note: It is important to condition the paint for 24 hours prior to mixing by placing all materials in the shop or hangar, with ambient temperatures between 13° and 35°C (55° to 95°F). The minimum temperature of the paint components should be 13°C (55°F) prior to mixing.*



### **Induction time:**

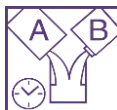
Not required



### **Viscosity:** (23°C/73°F)

- #4 Ford cup 30 seconds maximum

*Note: Viscosities quoted are typical values obtained when using specified mix ratio.*



### **Pot life:**

4 hours @ 21 - 25°C (70 - 77°F)

## Application guidelines

### **Optimum recommended application conditions:**

|                   |                       |
|-------------------|-----------------------|
| Temperature       | 15 - 30°C (59 - 86°F) |
| Relative Humidity | 20 - 90%              |

### **Application:**

Ground the aircraft and the application equipment before priming. Stir the primer slowly during the application. The suggested film thickness is 15 to 50 microns (0.6 to 2.0 mils). This can be accomplished with one medium cross coat with a 50% overlap.

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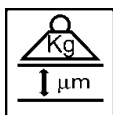
*These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.*



### Theoretical coverage:

22.5 square meters/liter at 25 microns dry film (916 square feet/gallon at 1 mil dry film)

Recommended dry film thickness; 15 to 50 microns (0.6 to 2.0 mils)



### Dry film density:

1.38 grams/cubic centimeter (11.52 pounds/gallon)

### Dry film weight:

35.01 grams/square meter at 25 microns dry film (0.00717 pounds/square foot at 1 mil dry film)



### Equipment:

09Y002 polyurethane primer is compatible with all current forms of spray equipment.

| Equipment type                               | Tip size                             | Pot pressure                      | Atomization pressure at the cap  |
|----------------------------------------------|--------------------------------------|-----------------------------------|----------------------------------|
| Electrostatic air spray gun                  | 1.2 mm or 1.5 mm                     | 10 to 20 psi<br>(0.69 to 1.4 bar) | 45 to 60 psi<br>(3.1 to 4.1 bar) |
| Electrostatic air assisted airless spray gun | #611 or #613<br>(Graco Nomenclature) | 700 to 1200 psi<br>(48 to 82 bar) | 40 to 60 psi<br>(2.8 to 4.1 bar) |
| High Volume Low Pressure spray gun (HVLP)    | 1.0 mm to 1.4 mm                     | 10 to 20 psi<br>(0.69 to 1.4 bar) | 10 psi maximum<br>(0.69 bar)     |
| Conventional air spray gun                   | 1.2 mm to 1.8 mm                     | 10 to 20 psi<br>(0.69 to 1.4 bar) | 45 to 60 psi<br>(3.1 to 4.1 bar) |

### Equipment cleaning:

Clean spray equipment as soon as possible after use. Flush spray equipment with IS-213 Polyurethane Reducer (MIL-T-81772 Type I) DeSoto® CN20, DeSoto® CN44, or Desoclean™ 45 high performance solvent cleaner. Once material is fully cured, use an approved chemical paint removal system to strip off coating.

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## Physical Properties (product)



**Color:** Brown (tinted to improve hiding)



**Gloss:** Not applicable



|                          |                              |
|--------------------------|------------------------------|
| <b>Dry times</b>         | <b>22 - 28°C (71 - 84°F)</b> |
| Set to touch / Tack-free | 5 hours maximum              |
| Dry to topcoat*          | 2 - 48 hours                 |
| Dry hard                 | 8 hours maximum              |
| Full cure                | 7 days minimum               |

\* Consult the material specification for the recommended dry to topcoat guidelines.

**VOC**

### **VOC:**

Mixed, ready to use VOC (EPA method 24) is < 340 grams/liter.



### **Flash point closed cup:**

Base Component -20°C (-4°F)

Activator Component -5°C (23°F)

### **Shelf life:**

12 months from date of manufacture to most OEM material specifications. Consult the specification to verify shelf life requirements.

*Note: Shelf life is provided for original, unopened containers.*

*Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.*

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## Storage recommendations



Inspect the condition of the container to ensure compliance. The material should be stored at temperatures between 5°C to 35°C (41°F to 95°F) to ensure shelf life.

*Note: When procuring to a qualified material specification, follow those storage instructions.*

## Health precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An SDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

**For industrial use only. Keep away from children.**

**Additional information can be found at: [www.ppgaerospace.com](http://www.ppgaerospace.com)**

**For sales and ordering information call the local PPG office at the numbers listed below:**

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#### **ASC – Australia**

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