

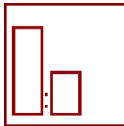
44W007 Chrome-Free Water Reducible Epoxy Primer

Product description

44W007 is a chromate-free, corrosion-inhibiting, water reducible, epoxy polyamide primer.

- Chromate-free
- Corrosion-inhibiting
- Chemical and solvent resistant
- Resistant to immersion in hydraulic fluids, lubricating oils and distilled water

Components



Mix ratio (by volume):

- 44W007 (base component) 3 parts
- 44W007 (catalyst component) 1 part
- Reducer (Distilled or Deionized water) 8 parts water by volume (approximately 200%)

Specifications



44W007 primer is qualified to the following material specifications:

- MIL-DTL-53030C Type I

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

Surface preparation and pretreatments



44W007 primer can be applied over clean, dry, intact aluminum surfaces treated with materials conforming to MIL-DTL-5541 or equivalent.

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. Do not stir or shake the base component longer than 5 minutes. Slowly add the one volume of catalyst to three volumes 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 10 MINUTES.** To the

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catalyzed primer, add approx. 8 volumes (200%) of distilled or deionized water. Slowly add the water in one-third increments, mixing thoroughly after each addition, until fully incorporated and homogeneous. Be sure to scrape the sides and bottom of the container. Constant agitation of the material during spray application is recommended. The water is used to adjust the viscosity. Volumes of water needed may vary between 175 – 225%.

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:

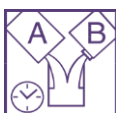
Not required



Viscosity: (23°C/73°F)

- #2 EZ Zahn cup 20 ± 2 seconds
- #4 Ford cup 16 ± 2 seconds

Note: Viscosities quoted are the typical ranges obtained when using specified mix ratio.



Pot life:

6 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:

Stir the primer slowly during the application. The suggested film thickness is 32.5 to 42.5 microns (1.3 to 1.7 mils). This can be accomplished with one medium coat with a 50% overlap.

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

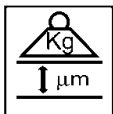


Theoretical coverage:

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8.1 square meters/liter at 25 microns dry film (330 square feet/gallon at 1 mil dry film)

Recommended dry film thickness; 32.5 to 42.5 microns (1.3 to 1.7 mils)



Dry film density:

1.90 grams/cubic centimeter (15.85 pounds/gallon)

Dry film weight:

48.24 grams/square meter at 25 microns dry film (0.00988 pounds/square feet at 1 mil dry film)



Equipment:

44W007 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 (0.69 to 1.4 bar) | 45 to 60 psi (3.1 to 4.1 bar) |
| *Electrostatic Air Assisted Airless Spray Gun | #611 or #613 (Graco Nomenclature) | 700 to 1200 psi (48 to 82 bar) | 40 to 60 psi (2.8 to 4.1 bar) |
| High Volume Low Pressure Spray Gun (HVLP) | 1.0 mm to 1.4 mm | 10 to 20 psi (0.69 to 1.4 bar) | 10 psi maximum (0.69 bar) |
| Conventional Air Spray Gun | 1.2 mm to 1.8 mm | 10 to 20 psi (0.69 to 1.4 bar) | 45 to 60 psi (3.1 to 4.1 bar) |

**Note: When spraying with electrostatic spray equipment, ensure that this is rated for use with water-borne coatings. Spraying water-borne coatings with regular electrostatic spray equipment can result in safety hazards.*

Equipment cleaning:

Water will clean approximately 95% of liquid primer remaining on equipment. Follow with IS-248 Cleaning Solvent for Water Reducible Primer to remove any residual primer from equipment. Once material has cured, use an approved chemical paint removal system to strip primer from parts and equipment. Is with water.

Physical properties (product)



Color: No darker than FED STD 595B # 27722 White

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Gloss: Not applicable



| Dry times | 21 - 27°C (70 - 80°F) |
|---------------|-------------------------------------|
| Tack free | 1 hour maximum |
| Overcoat time | 2 hours minimum to 8 hours maximum* |
| Dry to tape | 2 hours minimum |
| Dry through | 8 hours maximum |
| Full cure | 7 days |

*If the 8-hour maximum overcoat time is exceeded, solvent wipe the entire primed surface prior to applying topcoat. After 24 hours of dry time, scuff sand the entire primed surface followed by solvent wiping prior to applying topcoat

Note: Dry times above were established at room (ambient) temperatures, 75° ± 5°F and 50% ± 10% relative humidity.

Forced Dry Schedule: For dry to stack conditions only. Allow a minimum of 15 minutes flash off time at ambient temperatures* prior to exposing painted parts to high temperatures. Complete testing should be done prior to use. Below are suggested starting points. Other variables may affect these cure schedules.

| Temperature | Time |
|--------------|------------|
| 49°C (120°F) | 90 minutes |
| 60°C (140°F) | 60 minutes |
| 71°C (160°F) | 40 minutes |
| 82°C (180°F) | 30 minutes |

Note: Ambient temperatures are defined as 70° ± 10°F and 50% ± 10% Relative Humidity. For more information please refer to BAC 5736.



VOC:

| | |
|---|-----------------|
| Mixed, ready to use VOC (EPA method 24) | 339 grams/liter |
| Base Component | 334 grams/liter |
| Catalyst Component | 344 grams/liter |



Flash point closed cup:

| | |
|--------------------|-------------|
| Base Component | 22°C (72°F) |
| Catalyst Component | 31°C (87°F) |

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Shelf life:

12 months from date of manufacture to most OEM specifications. Consult the specification you are procuring 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.

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

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

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ASC – Australia

Tel 61 (3) 9335 1557

Fax 61 (3) 9335 3490

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Tel 65 6861 1119

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Americas

1 (818) 362-6711 or 1-800-AEROMIX

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