



# Eco-Prime™ EWDE072 Military Water-Borne Epoxy Primer

## TECHNICAL DATA SHEET

### Product Description

Eco-Prime™ EWDE072 military water-borne primer is a corrosion resistant, chemical and solvent resistant epoxy coating.

- Easy to apply with all current non-electrostatic spray equipment
- Excellent adhesion to aluminum and composite substrates
- Compatible with Desothane® HS topcoats
- Excellent fluid resistance
- Can be applied in a wide range of conditions
- Easy to remove with chemical strippers or dry media blasting
- Service temperature -54°C to 177°C (-65°F to 350°F)

### Components



#### Mix ratio (by volume):

- EWDE072A (base component) 4 parts
- EWDE072B (activator component) 1 part

### Specifications



EWDE072 primer is qualified to:

- MIL-PRF-85582 Type I Class C2

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

#### Product Compatibility:

EWDE072 primer is compatible with the following topcoat specifications:

- DMS 2115
- MIL-DTL-53039
- MIL-DTL-64159
- MIL-PRF-22750
- MIL-PRF-85285
- MMS-420

### Surface Preparation and Pretreatments



The surface must be thoroughly clean and free of oil, dust, etc. Aluminum alloy shall be treated with material conforming to MIL-C-5541 or equivalent.



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## Instructions for Use



### Mixing Instructions:

Prior to mixing, thoroughly shake the base component. Add the activator to the base component and stir well. Maintain constant agitation for 10 minutes to ensure proper mixing.

*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:

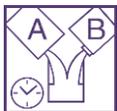
Not Required



### Viscosity: (23°C/73°F)

- |                         |                  |
|-------------------------|------------------|
| • #2 Signature Zahn cup | 26 to 41 seconds |
| • #4 Ford cup           | 20 to 30 seconds |
| • BSB3 cup              | 42 to 66 seconds |
| • BSB4 cup              | 23 to 45 seconds |
| • AFNOR #4 cup          | 22 to 33 seconds |

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



### Pot Life:

4 hours @ 21 - 25°C (70 - 77°F)

Agitation during the entire pot life period is recommended. Without agitation, the admix will increase in viscosity. If this occurs, agitation and/or addition of a small amount of deionized water (less than 5% by volume) might be necessary to adjust the viscosity to within the optimum range.

## Application Guidelines

### 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 23 microns (0.6 to 0.9 mils). This can be accomplished by one medium coat with a 50% overlap.

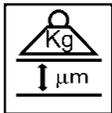
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*These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.*



### Theoretical Coverage:

11 square meters/liter at 25 microns dry film (440 square feet/gallon at 1 mil dry film)  
Recommended dry film thickness; 15 to 23 microns (0.6 to 0.9 mils)



### Dry Film Density:

1.96 grams/cubic centimeter (16.32 pounds/gallon)

### Dry Film Weight:

49 grams/square meter at 25 microns dry film (0.010 pounds/square feet at 1 mil dry film)



### Equipment:

EWDE072 primer is compatible with conventional and HVLP spray equipment.

Equipment Type	Tip Size	Pot Pressure	Atomization Pressure at the Cap
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)

### Equipment Cleaning:

Clean spray equipment as soon as possible after use. Flush spray equipment with DeSoto® CN20, DeSoto® CN44, or Desoclean™ 45 high performance solvent cleaner.

## Physical Properties (product)



**Color:** Light Green



**Gloss:** Not Applicable



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Dry Times	13 - 21°C (55 - 70°F)	22 - 28°C (71 - 84°F)	>29°C (>85°F)
Tack Free	2 hours	1 hour	30 minutes
Dry to Topcoat	4 - 24 hours	4 - 24 hours	4 - 24 hours
Dry to Stack	6 hours	4 hours	5 hours
Dry Hard	6 hours	6 hours	6 hours
Full Cure	14 days	14 days	14 days

Accelerated cure to dry hard:

Allow 15 minutes flash off at 24°C ± 3°C (75°F ± 10°F)  
followed by 60 minutes at 60°C (140°F)



## VOC (EPA method 24):

Mixed, ready to use VOC	340 grams/liter
Base Component	269 grams/liter
Activator Component	627 grams/liter



## Flash point closed cup:

Base Component	99°C (210°F)
Activator Component	13°C (55°F)

## Shelf Life:

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

24 months from date of manufacture for PRC-DeSoto Standard.

*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.*



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## 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)**

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Issue Date: 1/15

Lit: 2032