

Product description

EWDG155 is a chrome-free, corrosion inhibitive, water-borne epoxy primer used on aircraft exterior and components.

- Compatible with Desothane[®] HS topcoats
- Excellent adhesion
- Excellent fluid resistance
- Compatible with all non-electrostatic spray equipment
- Service temperature -54°C to 177°C (-65°F to 350°F)

Components



Mix ratio (by volume):

- EWDG155A (base component) 3 parts
- EWDG155B (activator component) 1 part

Specifications



EWDG155 primer meets the performance requirements of:

• MIL-PRF-85582 Type I Class N

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

Product compatibility:

EWDG155 primer is compatible with the following topcoat specifications:

- AIMS 04-04-013
- BAMS 565-09
- BMS 10-60 Type I & Type II
- BMS 10-72 Type VIII
- DMS 2115
- DMS 2143

Surface preparation and pretreatments



EWDG155 primer can be applied over clean, dry, intact aluminum and composite surfaces. Aluminum surfaces shall be treated with materials conforming to MIL-DTL-5541, MIL-DTL-81706 or equivalent.

- DPM 6456
- DPM 6546
- MEP 10-069
- MIL-PRF-85285
- MMS 420

Instructions for use



Mixing instructions:

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

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:

Temperature	13 - 21°C	22 - 28°C	>29°C
	(55 - 70°F)	(71 - 84°F)	(>85°F)
Induction time required	45 minutes	30 minutes	15 minutes



Viscosity: (23°C/73°F)

- #2 Signature Zahn cup
 - #4 Ford cup

35 to 48 seconds 25 to 35 seconds

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



Pot life:

4 hours @ 21 - 25°C (70 - 77°F)

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 12.5 to 22.5 microns (0.5 to 0.9 mils). This can be accomplished with one medium coat with a 50% overlap. Stainless steel pots are recommended with water-borne primer. Use a plastic liner with steel pots. Without agitation, the admixed material 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 stated above.

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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:

14 square meters/liter at 25 microns dry film (572 square feet/gallon at 1 mil dry film) Recommended dry film thickness; 12.5 to 22.5 microns (0.5 to 0.9 mils)



Dry film density:

1.44 grams/cubic centimeter (12 pounds/gallon)

Dry film weight:

36 grams/square meter at 25 microns dry film (0.00744 pounds/square feet at 1 mil dry film)



Equipment:

EWDG155 is compatible with current forms of 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: Gray



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	1 ½ hours	1 hour	45 minutes
Dry to stack	5 hours	4 hours	3 hours
Dry through	7 hours	6 hours	5 hours
Dry to topcoat	7 - 72 hours	6 - 72 hours	5 - 72 hours
Full cure	14 days	14 days	14 days

Accelerated cure:

For dry through

Allow 30 minutes flash off at 24°C \pm 3°C (75°F \pm 10°F) followed by 60 minutes at 60°C (140°F)

For full cure

Allow 30 minutes flash off at 24°C \pm 3°C (75°F \pm 10°F) followed by 24 hours at 60°C (140°F)

Note: After 72 hours, scuff sand then apply light coat of primer prior to top coating.



VOC (EPA method 24):

Mixed, ready for use VOC340 grams/literBase Component333 grams/literActivator Component0 grams/liter



Flash point closed cup:

Base Component	49°C (120°F)
Activator Component	113°C (235°F)

Shelf life:

24 months from date of manufacture.

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

<u>Note:</u> 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

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

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Issue Date: 12/19 Lit: 4148

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