

Eco-Prime™ EEAY051 Military Epoxy Primer

TECHNICAL DATA SHEET

Product Description

Eco-Prime™ EEAY051 military epoxy primer is high solids chemical and solvent resistant. This primer is designed to be applied to aluminum and composite surfaces prior to top coating.

- Excellent adhesion and corrosion resistance.
- Compatible with Desothane® HS topcoats
- Excellent fluid resistance
- Compatible with all current spray equipment
- Can be applied in a wide range of conditions
- Can be removed with chemical strippers or dry media blasting
- Service temperature -54°C to 177°C (-65°F to 350°F)

Components



Mix ratio (by volume):

- EEAY051A (base component) 3 parts
- EEAY051B (activator component) 1 part

Specifications



EEAY051 epoxy primers are qualified to:

- FMC9638-01
- MCS 9053 Type I Class 1 Grade 1
- MIL-PRF-23377 Type I Class C2
- PS 13375
- RPS 13.97 Type II Class L

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

Product Compatibility:

EEAY051 primer is compatible with the following topcoat specifications:

- DMS 2115
- MIL-DTL-53039
- MIL-DTL-65419
- MIL-PRF-22750
- MIL-PRF-85285
- MMS 420

Surface Preparation and Pretreatments



Eco-Prime™ EEAY051 high solids 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.

Eco-Prime™ EEAY051 Military Epoxy Primer

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. Induction time is required.

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:

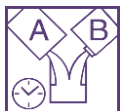
Temperature	13 - 21°C (55 - 70°F)	22 - 28°C (71 - 84°F)	>29°C (>85°F)
Induction Time Required	30 minutes	30 minutes	30 minutes



Viscosity: (23°C/73°F)

- #4 Ford cup Less than 40 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 to 23 microns (0.5 to 0.9 mils). This can be accomplished by one medium coats 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.

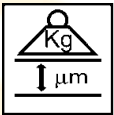
Eco-Prime™ EEAY051 Military Epoxy Primer



Theoretical Coverage:

23 square meters/liter at 25 microns dry film (950 square feet/gallon at 1 mil dry film)

Recommended dry film thickness; 12 to 23 microns (0.5 to 0.9 mils)



Dry Film Density:

1.76 grams/cubic centimeter (14.66 pounds/gallon)

Dry Film Weight:

44.0 grams/square meter at 25 microns dry film (0.0090 pounds/square feet at 1 mil dry film)



Equipment:

EEAY051 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)

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: Yellow



Gloss: Not Applicable

Eco-Prime™ EEAY051 Military Epoxy Primer



Dry Times	13 - 21°C (55 - 70°F)	22 - 28°C (71 - 84°F)	>29°C (>85°F)
Tack Free	7 hours	5 hours	3 hours
Dry Through	10 hours	8 hours	6 hours
Dry to Topcoat	7 - 24 hours	5 - 24 hours	3 - 24 hours
Full Cure	14 days	14 days	14 days

Accelerated cure for 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:

Mixed, ready to use VOC (EPA method 24)	340 grams/liter
Base Component	324 grams/liter
Activator Component	299 grams/liter



Flash point closed cup:

Base Component	26°C (78°F)
Activator Component	32°C (89°F)

Shelf Life:

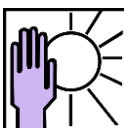
12 months from date of manufacture to most OEM material specifications. Consult the specification to verify shelf life requirements.

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.



Eco-Prime™ EEAY051 Military Epoxy Primer

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:

Asia Pacific

ASC – Australia

Tel 61 (3) 9335 1557
Fax 61 (3) 9335 3490

ASC – Japan

Tel 81 561 35 5200
Fax 81 561 35 5201

ASC – South East Asia

Tel 65 6861 1119
Fax 65 6861 6162

ASC – Suzhou

Tel (86-512) 6661 5858
Fax (86-512) 6661 6868

ASC – Tianjin

Tel (86-022) 2482 8625
Fax (86-022) 2482 8600

Americas

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

Europe and Middle East

ASC – Central Europe

Tel 49 (40) 742 193 10
Fax 49 (40) 742 139 69

ASC – Middle East & India

Tel (971) 4 883 9666
Fax (971) 4 883 9665

ASC – North Europe

Tel 44 (0) 1388 770222
Fax 44 (0) 1388 770288

ASC – South Europe

Tel 33 (0) 235 53 43 71
Fax 33 (0) 235 53 54 44

Desoclean, Desothane, DeSoto, and Eco-Prime are trademarks of PRC-DeSoto International, Inc.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

PRC-DeSoto International, Inc.

12780 San Fernando Road
Sylmar, CA 91342

www.ppgaerospace.com

Issue Date: 9/15
Lit: 4195