Technical Data Sheet Aerospace Coatings



44GN057 Water Reducible Epoxy Primer – Touch Up

Product description

44GN057 is a water reducible, chemically cured, two-component epoxy polyamide primer designed to protect the structural interior of aircraft from corrosion. 44GN057 is specially formulated for brushing / touch-up application.

- Corrosion inhibiting
- Compatible with epoxy and urethane interior topcoats
- Excellent adhesion to aluminum and composite surfaces
- Chemical and solvent resistant
- Resistant to immersion in hydraulic fluids, lubricating oils, phosphate ester based hydraulic fluids and distilled water

Components



Mix ratio (by volume):

- 44GN057 (base component)
- 44GN057CAT (catalyst component)
- Reducer (Distilled or Deionized water)

2 parts

1 part

3.75 parts water by volume (approximately 125 ± 10%)

Specifications



44GN057 primer is qualified to the following material specificaitons:

- BMS 10-11 Ty I CI A Gr E
- BAC 5736

- GMS 5005 Type II
- HJMS-7102

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

Product compatibility:

44GN057 primer is compatible with the following topcoat specifications:

- BMS 10-11 Type II
- BMS 10-60 Type I & II

CMS-CT-203 Type I Class 4

Surface preparation and pretreatments



44GN057 primer can be applied over clean, dry, intact aluminum and composite surfaces. Aluminum surfaces shall be treated with materials conforming to MIL-DTL-5541 or equivalent.

Instructions for use



Mixing instructions:

44GN057 is available in 1 and 4 ounce touch up kits. An acetone-blend thinner is available upon request. Other kit sizes are available upon request.

The kit consists of an inner cup, which contains the 44GN057 catalyst component and is located inside an outer cup (bottle) that contains the 44GN057 base component. The thinner component is housed in a separate bottle.

To mix, remove the outer lid and pour the 44GN057 catalyst component from the inner cup into the 44GN057 base component in the outer cup (bottle). Replace the lid and shake by hand until well mixed, approximately 2 minutes. Open the lid and add the thinner component. Replace the lid and shake by hand until well mixed and uniform.

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)

Not applicable



Pot life: @ 21 - 25°C (70 - 77°F)

- 150 minutes maximum when thinned with water
- 6 hours maximum when thinned with acetone-water blend

Application guidelines

Recommended application conditions:

Temperature 15 - 30°C (59 - 86°F)

Relative Humidity 20 - 90%

Application:

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: at 25 microns (1 mil dry film)

1 oz. Touch-up kit: 0.31 square meters (3.42 square feet)

4 oz. Touch-up kit: 1.27 square meters (13.7 square feet)

Recommended dry film thickness; 12.5 to 22.5 microns (0.5 to 0.9 mils)



Dry film density:

1.66 grams/cubic centimeter (13.85 pounds/gallon)

Dry film weight:

42.2 grams/square meter at 25 microns dry film (0.00864 pounds/square feet at 1 mil dry film)



Equipment:

44GN057 primer is compatible with all current forms of spray equipment.

*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.

Physical Properties (product)



Color: BAC 452 green



Gloss: 10 G.U. maximum at 60°



Dry Times	21 - 27°C (70 - 80°F)
Dust Free	15 minutes maximum
Tack Free	2 hours maximum

Dry Through	6 hours maximum
Dry to Tape	4 hours minimum
Full Cure	7 days

Note: Dry times above were established at room (ambient) temperatures, $75^{\circ} \pm 5^{\circ}F$ and $50\% \pm 10\%$ 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 $70^{\circ} \pm 10^{\circ}$ F and $50\% \pm 10\%$ Relative Humidity. For more information please refer to BAC 5736.



VOC:

Mixed, ready to use VOC (EPA method 24)	337 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)

Shelf Life:

4 months from date of packaging

Note: Shelf life is provided for 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.

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

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: 9/24 Lit: 4633