

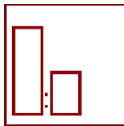
44GN054 Water Reducible Epoxy Primer

Product description

44GN054 is a water reducible, chemically cured, two-component epoxy polyamide primer. 44GN054 is formulated to protect the structural interior of aircraft from corrosion.

- 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):

- | | |
|--|--|
| • 44GN054 (base component) | 2 parts |
| • 44GN054CAT (catalyst component) | 1 part |
| • Reducer (Distilled or Deionized water) | 4.5 parts water by volume (approximately 150%) |

Specifications



44GN054 primer is qualified to the following material specifications:

- | | |
|------------|--------------|
| • DMS 1786 | • HMS-D1-002 |
| • DPM 2232 | • STM0930 |

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

Surface preparation and pretreatments



44GN054 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:

1-Step mixing (mixed in base container):

Add the entire catalyst component to the base component. Fill the can to the chime with distilled or deionized water. Secure the can lid and place on paint shaker in an inverted

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position for 10 – 15 minutes. **DO NOT SHAKE LONGER THAN 15 MINUTES.** Primer is now ready for use. Application viscosity should be 20 ± 2 seconds in a # 2 EZ Zahn Cup. Constant agitation is recommended. Add small amounts of water if necessary to achieve desired viscosity. A slight variation in the amount of water is normal.

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:

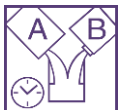
Not Required



Viscosity: (23°C/73°F)

- #2 EZ Zahn cup 20 ± 2 seconds

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



Pot life:

3 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 20 to 32.5 microns (0.8 to 1.3 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.

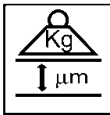


Theoretical coverage:

9.65 square meters/liter at 25 microns dry film (394 square feet/gallon at 1 mil dry film)

Recommended dry film thickness; 20 to 32.5 microns (0.8 to 1.3 mils)

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Dry film weight:

42.8 grams/square meter at 25 microns dry film (0.00877 pounds/square feet at 1 mil dry film)



Equipment:

44GN054 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: DN9295 Green



Gloss: Not applicable

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Dry Times	21 - 27°C (70 - 80°F)
Dry to stack	90 minutes
Full Cure	7 days

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
54°C (130°F)	30 minutes



VOC:

Mixed, ready to use VOC (EPA method 24)	338 grams/liter
Base Component	335 grams/liter
Catalyst Component	344 grams/liter



Flash point closed cup:

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

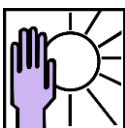
Shelf life:

9 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.

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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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