

44GN072 Water Reducible Low Density Epoxy Primer

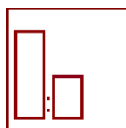
TECHNICAL DATA SHEET

Product Description

44GN072 is a water reducible, chemically cured, low density epoxy polyamide primer.

- Corrosion inhibiting
- Excellent adhesion
- 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):

- | | |
|--|----------------------------------|
| • 44GN072 (base component) | 2 parts |
| • 44GN072CAT (catalyst component) | 1 part |
| • Reducer (Distilled or Deionized water) | 4.5 parts water by volume (150%) |

Also available in touch up kits. For more details see [Instructions For Use](#) Section.

Specifications



44GN072 primer is qualified to:

- | | |
|---|---------------------------------|
| • 5PTMRT03 | • MBO 125-0102 |
| • BAMS 565-001 Grade B
Category 2 Type 2 | • MIL-PRF-85582 Type I Class C2 |
| • LMA-MR003 Class 1 Type I
Grade A | • MMS-423 |
| | • RMS-176 |

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

Product Compatibility:

44GN072 primer is compatible with the following topcoat specifications:

- | | |
|-----------------|-----------------|
| • DMS 2115 | • MIL-PRF-85285 |
| • MIL-PRF-22750 | • MIL-PRF-53039 |
| • MIL-PRF-64159 | • MMS-420 |

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Surface Preparation and Pretreatments



44GN072 can be applied over clean, dry, intact aluminum surfaces pretreated in accordance with MIL-DTL-5541, MIL-A-8625, or equivalent.

Instructions for Use



Mixing Instructions:

1-Step Mixing (mixed in base container):

Slowly 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 shake on paint shaker in an inverted position for 10 – 15 minutes. Do not shake longer than 15 minutes. Primer is now ready for use.

Touch-up kits available in 2TU and 4TU configuration:

Touch-up kit configuration consists of an inner cup, which contains the 44GN072CAT catalyst (or catalyst/acetone blend) located inside an outer cup (bottle) that contains the 44GN072 base component.

To mix, remove lid, pour contents of inner cup (catalyst or catalyst/acetone blend) into outer cup (base), add supplied water. Replace lid and shake well by hand, approximately 2 minutes. Material is now ready to apply.

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

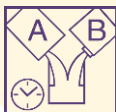


Viscosity: (23°C/73°F)

- | | |
|------------------|------------------|
| • #2 EZ Zahn cup | 18 to 22 seconds |
| • #4 Ford cup | 14 to 18 seconds |

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

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Pot Life:

6 hours @ 21 - 25°C (70 - 77°F)

Application Guidelines

Optimum Recommended Application Conditions:

Temperature	15 - 30°C (59 - 86°F)
Relative Humidity	20 - 70%

Application:

Ground the aircraft and the application equipment before priming. Stir the primer slowly during the application. The suggested film thickness is 15 to 22.5 microns (0.5 to 0.9 mils). This can be accomplished with one medium coat with a 50% overlap.

Touch-Up-Kit Application:

After mixing the touch up kit, use a brush, roller or Preval® Sprayer to apply.

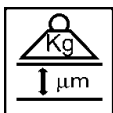
These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.



Theoretical Coverage:

9.72 square meters/liter at 25 microns dry film (396 square feet/gallon at 1 mil dry film)

Recommended dry film thickness; 15 to 22.5 microns (0.6 to 0.9 mils)



Dry Film Density:

1.41 grams/cubic centimeter (11.77 pounds/gallon)

Dry Film Weight:

35.78 grams/square meter at 25 microns dry film (0.00733 pounds/square feet at 1 mil dry film)

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Equipment:

44GN072 primer is compatible with all current forms 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.

Physical Properties (product)



Color: Green



Gloss: Not applicable



Dry Times	21 - 27°C (70 - 80°F)
Tack Free	1 hour minimum
Dry Hard	6 hours maximum
Overcoat Time	2 hours minimum to 8 hours maximum

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Dry to tape	6 hours minimum
Full Cure	14 days maximum

Note: Dry times above were established at room (ambient) temperatures, 70° ± 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
49°C (120°F)	45 minutes
60°C (140°F)	30 minutes
71°C (160°F)	20 minutes
82°C (180°F)	15 minutes

Note: Ambient temperatures are defined as 70° ± 5°F and 50% ± 10% relative humidity.



VOC:

Mixed, ready to use VOC (EPA method 24)	134 grams/liter
Base Component	334 grams/liter
Catalyst Component	340 grams/liter



Flash point closed cup:

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

Shelf Life:

Can kit: 12 months from date of manufacture.

Touch Up kit: 6 months from date of packaging.

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.

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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:

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PRC-DeSoto International, Inc.
12780 San Fernando Road
Sylmar, CA 91342

www.ppgaerospace.com

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