

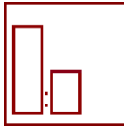
44GN098 Water Reducible High Performance Epoxy Primer

Product description

44GN098 is a chrome-free, water reducible, chemically cured, polyamide primer with corrosion inhibiting properties.

- Chrome-free
- 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):

- 44GN098 (base component) 2 parts
- 44GN098CAT (catalyst component) 1 part
- Reducer (Distilled or Deionized water) 4 to 4.5 parts water by volume
Range 135% to 150%

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

Specifications



44GN098 primer is qualified to:

- 5PTMRT09 Grade B
- FMC9673-01
- FMS 3027 Form 3
- HMS 15-1100 Type I Class 2 Grade N
- LMA-MR003 Class 2 Type II Grade A
- MIL-PRF-85582 Type I Class N
- PWA 36515-3

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

Product Compatibility:

44GN098 primer is compatible with the following topcoat specifications:

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

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Surface preparation and pretreatments



44GN098 can be applied over clean, dry, intact aluminum surfaces treated with materials conforming to MIL-DTL-5541, MIL-A-8625 or equivalent.

Instructions for use



Mixing instructions:

Standard can kit (mixed in separate container):

Stir or shake the base component to ensure any pigment, which may have settled on the bottom of the can, has been fully incorporated into the base. Do not stir or shake the base component longer than 5 minutes. Pour two volumes of base component into a separate clean container. Slowly add the one volume of catalyst to the two volumes base component. Mix by hand stirring, paint shaker or mechanical mixing to ensure the base/catalyst mixture is homogeneous. Do not shake or mechanically mix material for longer than 5 minutes. To the catalyzed primer, add approximately 4 volumes (135%) of distilled or deionized water. Slowly add the water in one-third increments, mixing thoroughly after each addition, until fully incorporated and homogeneous. Be sure to scrape the sides and bottom of the container. Constant agitation of the material during spray application is recommended. Water is used to adjust the viscosity and the amount of water added can be adjusted from 135% to 150% depending on application.

This packaging option is available in various kit configurations, for kit sizes contact your local Application Support Center.

1-Step Mixing (mixed in base container):

Stir or shake the base component to ensure any pigment, which may have settled on the bottom of the can, has been fully incorporated into the base. Do not shake the base component longer than 5 minutes. Slowly add the entire catalyst component to the base component. Add 135% to 150% by volume of distilled or deionized water, depending on application or material specification requirements. Secure the can lid and shake on paint shaker in an inverted position for 5 minutes. Do not shake longer than 5 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 44GN098CAT catalyst located inside an outer cup (bottle) that contains the 44GN098 base component, and a container with water.

To mix, remove lid, pour contents of inner cup (catalyst) 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.

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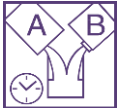
**Induction time:**

Not required

**Viscosity:** (23°C/73°F)

- #2 EZ Zahn cup 18 to 24 seconds
- #4 Ford cup 14 to 20 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

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:

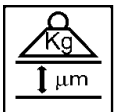
After mixing the touch up kit, use a brush, roller or Preval® Sprayer to apply.

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:**

11 square meters/liter at 25 microns dry film (441 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:**

1.65 grams/cubic centimeter (13.76 pounds/gallon)

Dry film weight:

41.94 grams/square meter at 25 microns dry film (0.00859 pounds/square feet at 1 mil dry film)

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Equipment:

44GN098 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: 25 G.U. maximum at 60°



Dry times	21 - 27°C (70 - 80°F)
Tack free	1 hour maximum
Overcoat time	2 hours minimum to 8 hours maximum*
Dry hard	6 hours maximum
Full cure	14 days maximum

*If the 8-hour maximum overcoat time is exceeded, solvent wipe the entire primed surface prior to applying topcoat. After 24 hours of dry time, scuff sand the entire primed surface followed by solvent wiping prior to applying topcoat

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Higher temperatures will reduce the recoat time while lower temperatures will increase the recoat times.

Note: Dry times above were established at room (ambient) temperatures, 70° ± 5°F and 50% ± 10% relative humidity at 0.6 – 1.0 mils of dry film build.

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)	133 grams/liter
Base Component	297 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:

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.

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:

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

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This document has been reviewed by the PPG Aerospace Export Control Department and has been determined to contain only EAR99 controlled data

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