

44GN008A Water Reducible Type II Epoxy Primer

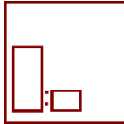
TECHNICAL DATA SHEET

Product Description

44GN008A is a chromated, water reducible, chemically cured, two-component epoxy polyamide primer.

- Corrosion inhibiting
- 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):

- 44GN008A (base component) 3 parts
- 44GN008ACAT (catalyst component) 1 part
- Reducer (Distilled or Deionized water) 8 parts water by volume (approximately 200%)

Specifications

44GN008A primer is qualified to:

- MIL-PRF-85582 Type II Class C1

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

Product Compatibility:

44GN008A primer is compatible with the following topcoat specifications:

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

Surface Preparation and Pretreatments



44GN008A can be applied over clean, dry, intact aluminum surfaces treated with materials conforming to MIL-DTL-5541 or equivalent.

44GN008A Water Reducible Type II Epoxy Primer

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 three volumes of base component into a separate clean container. Slowly add the one volume of catalyst to the three 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 approx. 8 volumes (200%) 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. The water is used to adjust the viscosity. Volumes of water needed may vary between 175 – 225%.

Kit Size	44GN008A Base	44GN008ACAT	D.I. Water	Yield
GK	96 oz. / 2.84 L	32 oz. / 946 ml	256 oz. / 7.57 L	3 gal. / 11.4 L
QK	24 oz. / 710 ml	8 oz. / 237 ml	64 oz. / 1.89 L	96 oz. / 2.8 L

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 5 minutes. Do not shake longer than 5 minutes. Primer is now ready for use.

Kit Size	44GN008A Base	44GN008ACAT	D.I. Water	Yield
1GK	32 oz. / 946 ml	10.7 oz. / 316 ml	85.3 oz. / 2.5 ml	128 oz. / 3.79 L
1QK	8 oz. / 237 ml	2.7 oz. / 80 ml	21 oz. / 621 ml	31.7 oz. / 976 ml

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.

44GN008A Water Reducible Type II Epoxy Primer



Induction Time:

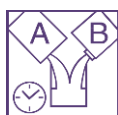
Not Required



Viscosity: (23°C/73°F)

- #2 EZ Zahn cup 20 ± 2 seconds
- #4 Ford cup 16 ± 2 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%

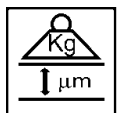
Application:

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:

8.2 square meters/liter at 25 microns dry film (333 square feet/gallon at 1 mil dry film)
Recommended dry film thickness: 15 to 23 microns (0.6 to 0.9 mils)



Dry Film Density:

1.77 grams/cubic centimeter (14.77 pounds/gallon)

Dry Film Weight:

4.16 grams/square meter at 25 microns dry film (0.00917 pounds/square feet at 1 mil dry film)

44GN008A Water Reducible Type II Epoxy Primer



Equipment:

44GN008A 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.

Physical Properties (product)



Color: Dark Green



Gloss: Not Applicable

44GN008A Water Reducible Type II Epoxy Primer



Dry Times	22 - 28°C (71 - 84°F)
Tack Free	1 hour maximum
Dry to Topcoat	2 hours
Dry Hard	6 hours maximum
Full Cure	7 days

Note: Dry times above were established at room (ambient) temperatures, 75° ± 5°F and 50% ± 10% relative humidity.

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° ± 10°F and 50% ± 10% relative humidity.

VOC

VOC:

Mixed, ready to use VOC (EPA method 24)	333 grams/liter
Base Component	386 grams/liter
Catalyst Component	176 grams/liter



Flash point closed cup:

Base Component	47°C (116°F)
Catalyst Component	31°C (87°F)

44GN008A Water Reducible Type II Epoxy Primer

Shelf Life:

12 months from date of manufacture.

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 21°C to 32°C (70°F to 90°F) to ensure shelf life.

Note: When procuring to a qualified material specification, follow those storage instructions.

44GN008A Water Reducible Type II 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

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: 9/16
Lit: 4486