02GN084 Chrome-Free Epoxy Polyamide Primer

Product description

02GN084 is a chemically cured, chrome-free, 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):

- 02GN084 (base component) — 3 parts
- 02GN084CAT (catalyst component) — 1 part

Note: If additional thinning is required use MIL-DTL-81772 Type II approved thinner where VOC regulations permit. See Instructions for Use section for more details.

Available in touch up kits. For more details see Instructions for use section.

Specifications

02GN084 primer is qualified to:

- 5PTMRA01
- MCS 9053
- MIL-PRF-23377 Type I Class N

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

Product Compatibility:

02GN084 primer is compatible with the following topcoat specifications:

- MIL-PRF-85285
- MMS-420

Surface preparation and pretreatments

02GN084 primer can be applied over clean, dry, intact aluminum and composite surfaces. Aluminum surfaces shall be treated with materials conforming to MIL-DTL-5541, MIL-A-8625, or equivalent.

Instructions for use

Mixing instructions:

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 unless sediment is observed. If sediment is observed, shake for another 5 minutes. Slowly add one volume of catalyst to three volumes base component. Mix by hand stirring, paint shaker or mechanical mixing to ensure the base/catalyst mixture is completely homogeneous. Do not shake or mechanically mix material for longer than 10 minutes. Constant agitation of the material during spray application is recommended.

If additional thinning is required, use IS-237 or other MIL-DTL-81172 Type II approved thinner. Note that addition of MIL-DTL-81172 will increase the mixed VOC, therefore consult regional VOC regulations and restrictions.

02GN084 is available in 2-ounce and 4-ounce touch up kits:

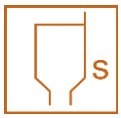
All touch-up kit configurations consist of an inner cup, which contains the 02GN084CAT catalyst located inside an outer cup (bottle) that contains the 02GN084 base component.

To mix, remove lid, pour contents of inner cup (catalyst) into outer cup (base). 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:

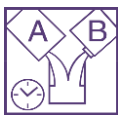
Not required



Viscosity: (23°C/73°F)

- #4 Ford cup 40 seconds maximum

Note: Viscosities quoted are the typical values 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%

Spray 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 (0.6 to 0.9 mils). This can be accomplished by one medium coat with 50% overlap.

Touch-Up-Kit application: After mixing the touch up kit, use brush or roller 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:

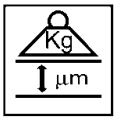
19 square meters/liter at 25 microns dry film (778 square feet/gallon at 1 mil dry film)

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

Touch up kit theoretical coverage at 25 microns (1 mil) dry film:

2 oz. TUK: 12.15 square feet

4 oz. TUK: 24.3 square feet



Dry film weight:

39.8 grams/square meter at 25 microns dry film (0.00815 pounds/square feet at 1 mil dry film)

Equipment: 02GN084 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)

Equipment cleaning:
Use IS-237 Epoxy Reducer (MIL-DTL-81772 Type II) to remove any liquid or 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: Light Aqua Green

Gloss: Not Applicable

Dry times	22 - 28°C (71 - 84°F)
Tack Free	5 hours maximum
Topcoat window	5 - 24 hours
Dry hard	8 hours maximum
Full cure	14 days maximum

Note: *Dry times above were established at room (ambient) temperatures, 75° ± 5°F and 50% ± 10% relative humidity at approximately 0.6-1.0 mils of dry film build. After 8 hours cure, wipe the entire primed surface with acetone. Apply topcoat within 2 hours of solvent wiping. After 24 hours of cure, scuff sand the entire primed surface then wipe with acetone. Apply topcoat within 2 hours of solvent wiping. [Ref: T.O. 1-1-8 Section 6.12.2.5, JAN 12, 2010]. Note: Higher temperatures will reduce the recoat time while lower temperatures will increase the recoat times.*

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
120°F	45 minutes
140°F	30 minutes
160°F	20 minutes
180°F	15 minutes

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

VOC:

Mixed (EPA method 24)	338 grams/liter
Base Component (EPA method 24)	426 grams/liter
Catalyst Component (EPA method 24)	190 grams/liter

Flash point closed cup:

Base Component	8°C (46°F)
Catalyst Component	8°C (46°F)

Shelf Life:

Can kits: 12 months from date of manufacture

Touch up kits: 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 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.

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

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