

PRODUCT INFORMATION DATA SHEET

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44W007 (44-W-7) Water Reducible Epoxy Primer

Product Information

MIL-DTL-53030C TYPE I **Specifications**

Description Non-chrome, water reducible, chemically cured

two-component epoxy polyamide primer compatible with chemical agent resistant polyurethane topcoats.

Corrosion inhibiting **Features** Chemical and Solvent Resistant

> Resistant to Hydraulic Fluids, Lubricating Oils, Phosphate Ester Based Hydraulic Fluids and Distilled water

No darker than Fed Std 595B # 27722 Color Reducer Distilled or Deionized water (200% reduction)

Mix Ratio 3 parts 44W007 base by volume to

1 part 44W007CAT catalyst by volume to 8 parts water by volume (200% reduction)

Kit size	44W007base	44W007CAT	D.I. Water
GK	96 oz / 2.84 L	32 oz / 946 mL	256 oz / 7.57 L
QK	24 oz / 710 mL	8 oz / 237 mL	64 oz / 1.89 L

Pot Life 6 hours at 77° ± 3°F

Viscosity initial. 20 ± 2 seconds # 2 EZ Zahn Cup

16 ± 2 seconds # 4 Ford Cup

Pot life: ≤ 8-second rise (typical)

Induction Time none required

Application Thickness 1.3 - 1.7 mils dry film thickness

Storage Stability 2 years from DOM when stored between

Recommended Store indoors between 72 - 80°F in original

unopened containers. Storage

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	

Ambient temperatures are defined as 70° ± 10°F and 50% ± 10% Relative Humidity.

Mixing and Thinning

GK & QK: 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. Slowly add the 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 homogeneous. DO NOT SHAKE OR MECHANICALLY MIX MATERIAL FOR LONGER THAN 10 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%.

Characteristics (At 200% Reduction)*

Characteristics	Base	Catalyst	Admixed
Weight per gallon (lbs)	13.5	9.4	9.7
% Solids by weight	77.6	80.5	33.5
% Solids by volume	56.2	78.2	20.6
Coatings VOC (g/L)	364	219	328
Coatings VOC (lbs/gal)	3.0	1.8	2.7
Material VOC (g/L)	364	219	109
Material VOC (lbs/gal)	3.0	1.8	0.91

Dry film density**: 1.90 g/cc Theoretical Coverage** per gallon: 330 sq. ft. Theoretical Coverage per GK: 990 sq. ft.

Theoretical Dry Film Weight per gallon kit as applied:

4.48 g/sq. ft (0.00988-lbs/sq. ft)

- Characteristics are calculated based on product formulas and ingredient characteristics as reported to Deft, Incorporated by raw material suppliers. Values reported are not specification values. They are presented for general information only.
- Dry film density and theoretical coverage based on proper application of coating at 1 mil dry film thickness and 100% transfer efficiency.

Conventional, Air, Air Assisted Airless, HVLP, Electrostatic spray equipment may be used to apply this material. For your application, please contact the equipment manufacturer for more specific information on Conventional, HVLP or Electrostatic spray applications, and recommendations on hose diameter and lengths.

Application Equipment

Packaging, Yields, Shipping Weight

This material is available in the follow kit sizes:

Kit size	Approx. Yield (Mixed)	Approx. Shipping Weight	
GK	3 gallons (7.6 L)	13.25 lbs (6.0 kg)	
QK	3 quarts (2.8 L)	3.65 lbs (1.7 kg)	

Additional kit sizes are available upon request.

Equipment Cleanup

Water will clean approximately 95% of liquid primer remaining on equipment. Follow with Deft's 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

Safety

Refer to the product label or Material Safety Data Sheet (MSDS) for each component for Personal Protective Equipment and Proper Handling.

Dry Times

Set to touch: 45 min, max Full Hardness: 24 hours, max Dry Hard: 2 hours, max Full Cure: 7 days

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

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