



PRODUCT INFORMATION DATA SHEET

17451 Von Karman Avenue, Irvine, CA 92614
 Tel (949) 474-0400 (800) 544-3338
 Fax (949) 474-7269
 www.deftfinishes.com

44GN049 (44-GN-49) Water Reducible Low IR Epoxy Primer

Product Information				Forced Dry Schedule												
Specification Description	MIL-PRF-85582E TYPE II CLASS C2 Chromated, water reducible, chemically cured, low IR, two-component epoxy polyamide primer			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. <table border="1" style="margin: 10px auto;"> <thead> <tr> <th>Temperature</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>120°F</td> <td>45 minutes</td> </tr> <tr> <td>140°F</td> <td>30 minutes</td> </tr> <tr> <td>160°F</td> <td>20 minutes</td> </tr> <tr> <td>180°F</td> <td>15 minutes</td> </tr> </tbody> </table> * Ambient temperatures are defined as 70° ± 10°F and 50% ± 10% Relative Humidity.			Temperature	Time	120°F	45 minutes	140°F	30 minutes	160°F	20 minutes	180°F	15 minutes
Temperature	Time															
120°F	45 minutes															
140°F	30 minutes															
160°F	20 minutes															
180°F	15 minutes															
Features	<ul style="list-style-type: none"> Corrosion inhibiting Chemical and Solvent Resistant Resistant to immersion in Hydraulic Fluids, Lubricating Oils, Phosphate Ester Based Hydraulic Fluids and Distilled water 															
Color	Dark Green															
Reducer	Distilled or deionized water (≈150% reduction)															
Mix Ratio	2 parts 44GN049 base by volume to 1 part 44GN049CAT catalyst by volume to 4.5 parts water by volume (150% ± 10% reduction)															
Kit Size	44GN049base	44GN049CAT	D.I. Water	Mixing and Thinning												
GK	85 oz / 2.51 L	43 oz / 1.27 L	192 oz / 5.68 L													
QK	21 oz / 621 mL	11 oz / 325 mL	48 oz / 1.42 L	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. <u>Do not</u> stir or shake the base component longer than 5 minutes. Slowly add the one volume of catalyst to 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 approx. 4 1/2 parts by volume (150%) 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 125 – 175%.												
Pot Life	4 hours at 73° ± 5°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	0.6 – 0.9 mils dry film thickness															
Storage Stability (Per MIL-PRF-85582)	1 year when stored between 35 – 115°F															
Recommended Storage	Store indoors between 70 – 90°F in original unopened containers.															
Characteristics (At 150% Reduction)*							Application Equipment									
Characteristics	Base	Catalyst	Admixed	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.												
Weight per gallon (lbs)	10.87	9.34	9.14													
% Solids by weight	75.1%	69.3%	33.3%													
% Solids by volume	60.0%	67.2%	25.0%													
Coatings VOC (g/L)	320	344	328													
Coatings VOC (lbs/gal)	2.67	2.87	2.73													
Material VOC (g/L)	320	344	131													
Material VOC (lbs/gal)	2.67	2.87	1.09													
Dry Film Density** 1.46 g/cc				Packaging, Yields, Shipping Weight												
Theoretical Coverage** per gallon as applied: 400 sq. ft.				This material is available in the follow kit sizes: <table border="1" style="margin: 10px auto;"> <thead> <tr> <th>Kit size</th> <th>Approx. Yield (Mixed)</th> <th>Approx. Shipping Weight</th> </tr> </thead> <tbody> <tr> <td>GK</td> <td>2.5 gallons</td> <td>12.4 lbs (5.63 kg)</td> </tr> <tr> <td>QK</td> <td>2.5 quarts</td> <td>3.4 lbs (1.54 kg)</td> </tr> </tbody> </table> Additional kit sizes are available upon request.			Kit size	Approx. Yield (Mixed)	Approx. Shipping Weight	GK	2.5 gallons	12.4 lbs (5.63 kg)	QK	2.5 quarts	3.4 lbs (1.54 kg)	
Kit size	Approx. Yield (Mixed)	Approx. Shipping Weight														
GK	2.5 gallons	12.4 lbs (5.63 kg)														
QK	2.5 quarts	3.4 lbs (1.54 kg)														
Theoretical Coverage per gallon kit as applied: 1000 sq. ft.																
Theoretical Dry Film Weight (per gallon kit as applied): 3.45 g/sq. ft. (0.00761-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.				Equipment Cleanup												
Dry Times				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.												
Tack Free	1 hours, min															
Dry Hard	6 hours, max			Safety												
Dry to tape	6 hours, min			Refer to the product label or Material Safety Data Sheet (MSDS) for each component for Personal Protective Equipment and Proper Handling.												
Note: Dry times above were established at room (ambient) temperatures, 75° ± 5°F and 50% ± 10% Relative Humidity.																