



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

ECCN # EAR99

45GY005 (45-GY-5)

BMS 10-103D Type I Grade E

Non-Chromate Water

Reducible Epoxy Primer

Product Information

Specification Description **BMS 10-103D TYPE I GRADE E**
Chromium-free water reducible, chemically cured, two-component epoxy polyamide primer

Features

- Composite Primer
- Chemical and Solvent Resistant
- Re-coat in two hours
- Resistant to immersion in Hydraulic Fluids, Lubricating Oils, and Distilled water

Color Light Gray

Reducer Distilled or Deionized water (≈150% reduction)

Mix Ratio 2 parts 45GY005 base by volume to
1 part 45GY005CAT catalyst by volume to
4.5 parts water by volume (150% ± 10% reduction)

Kit size	45GY005 BASE	45GY005CAT	D.I. Water
1GK	32 oz / 946 mL	16 oz / 473 mL	72 oz / 2.13 L
1QK	8 oz / 237 mL	4 oz / 118 mL	18 oz / 532 mL

Pot Life 4 hours at 72° ± 2°F

Viscosity initial: 20 ± 4 seconds # 2 EZ Zahn Cup

Induction Time none required

Application Thickness 0.5 – 0.7 mils dry film thickness

Storage Stability 12 months from date of manufacture when stored indoors between 40° – 100°F

Characteristics (At 150% Reduction)*

Characteristics	Base	Catalyst	Admixed
Weight per gallon (lbs)	13.7	9.34	9.52
% Solids by weight	79.4%	69.3%	38.0%
% Solids by volume	59.4%	67.2%	24.8%
Coatings VOC (g/L)	334	344	340
Coatings VOC (lbs/gal)	2.78	2.87	2.83
Material VOC (g/L)	334	344	135
Material VOC (lbs/gal)	2.78	2.87	1.13

Dry film density:** 1.82 g/cc
Theoretical Coverage per gallon as applied:** 400 sq. ft.
Theoretical Dry Film Weight per gallon kit as applied: 4.3 g/sq. ft (0.0095-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.

Dry Times

Dust Free 30 min, max
Dry to Tape 2 hours
Dry to Recoat 2 hours
Full Cure 7 days, max

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

Forced Dry Schedule

For dry to stack conditions only. Allow a minimum of 30 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

1GK & 1QK: Add the entire catalyst component to the base component. Fill the can to approximately the bottom of the chime with distilled or deionized water. Secure the can lid and place on paint shaker in an inverted position for 10 – 15 minutes. DO NOT SHAKE LONGER THAN 15 MINUTES. Primer is now ready for use.

Application Equipment

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.

Packaging, Yields, Shipping Weight

This material is available in the follow kit sizes:

Kit size	Approx. Yield (Mixed)	Approx. Shipping Weight
1GK	1 gallon	6.0 lbs (13.4 kg)
1QK	1 quart	1.9 lbs (4.3 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.