SHIPBUILDERS AND MARINE PAINTS AND COATINGS PRODUCT/PROCEDURE DATA SHEET

Date: 08/24/2020

. GENERIC TYPE AND DESCRIPTION: BIO-DEK™ Bond Coat

Specification Number: MIL-PRF-32584

NOTE: For Type/Grade/Class/Application information see QPD-Type V, Class 1&2, Grade A, Composition E

- II. MANUFACTURERS DATA:
 - (a) MANUFACTURER: BIO-DEK LLC, 2827 Andrew Ave., Pascagoula, MS 39567
 - (b) PRODUCT DESIGNATION: BIO-DEK™ Bond Coat
 - (c) COLOR(S): transluscent red
 - (d) USES: bond coat for Bio-Dek "BUTTERR" ™: Ultra Lightweight Underlayment and Tenacious One Step Epoxy Flooring
 - (e) TECHNICAL SERVICE REPRESENTATIVE: Murray DuBourdieu 714 975-0898
- III. PROPERTIES:
 - (a) PERCENT VOLUME SOLIDS (ASTM D2697): 100 %
 - (b) PERCENT WEIGHT SOLIDS (ASTM D2369): 100 %
 - (c) FLASH POINT (Click here to enter text):

Part A (Resin): >302 °F (>150 °C)

Part B (Hardener): >302 °F (150 °C)

(d) WEIGHT PER VOLUME (ASTM D1475):

Part A (Resin) 9.48 lb/gal (1006 g/L)

Part B (Hardener) 8.52 lb/gal (1098 g/L)

- (e) PERCENT EDGE RETENTION, IF REQUIRED BY APPLICABLE SPECIFICATION (N/A): Click here to enter text %
- (f) SHELF LIFE: 24 Months
- (g) VISCOSITY (Click here to enter text):

Part A (Resin): 2000 cp @ 70 °C (21 °F)

Part B (Hardener): 2000 cp @ 70 °C (21 °F)

- (h) PACKAGING: resin in gallon can, hardener in quart can, 2 full kits provided in a box
- (i) NUMBER OF COMPONENTS: 2
- (j) GLOSS (ASTM D523): 60-80 @ 60degrees GU
- (k) STORAGE REQUIREMENTS: TEMPERATURE: 50 °F (10 °C) MIN. 90 °F (32 °C) MAX.

ADDITIONAL PAINT STORAGE REQUIREMENTS: do not open prior to use

- (I) VOLATILE ORGANIC COMPOUNDS (VOCS- EPA TEST METHOD 24): <.04 lb/gal (<5 g/L)
- (m) WEIGHT PER AREA OF DRY FILM AT 1 MIL THICKNESS: .0057 lb/sq. ft. (27.84 g/m²)

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(n) SPECIAL PROPERTIES: Click here to enter text

IV. SURFACE PREPARATION MINIMUM REQUIREMENTS:

- (a) INITIAL CLEANLINESS: clean, dry and free of lose particulate.
- (b) TOUCH-UP CLEANLINESS: same as initial
- (c) PROFILE (1): 1 mils MIN. 3 mils MAX.
- (d) SPECIAL INSTRUCTIONS: temperature will effect the working time and dry to full cure
- (e) PRIMER REQUIREMENTS: not required, but can be used over tightly adhearing primer with 1-3 mil profile
- (f) MAXIMUM ALLOWABLE CONDUCTIVITY (Click here to enter text):

Refer to NAVSEA Standard item 009-32

(g) MAXIMUM DEGREE OF FLASH RUSTING ALLOWED: Surface shall be cleaned to a matte finish with at least 95% of the surface area free of all previously existing visible residues and the remaining 5% containing only randomly dispersed stains of rust, coatings, and foreign matter

SPECIAL SAFETY PRECAUTIONS: refer to MSDS

V. MIXING PROCEDURES

(a) MIXING RATIOS BY WEIGHT: 1.8:1 resin:hardner

BY VOLUME: 1.6:1 resin:hardner

(b) INDUCTION TIME: N/A Minutes

- (c) RECOMMENDED CLEANING SOLVENT (NO THINNING ALLOWED): alcohol, acetone, xylene
- (d) POT LIFE:Click here to enter text
- 3.5 Hours @ 70 °F (21 °C)

Graphs included on page: 4

(e) SPECIAL INSTRUCTIONS: Click here to enter text

VI. APPLICATION:

(a) ENVIRONMENTAL LIMITATIONS:

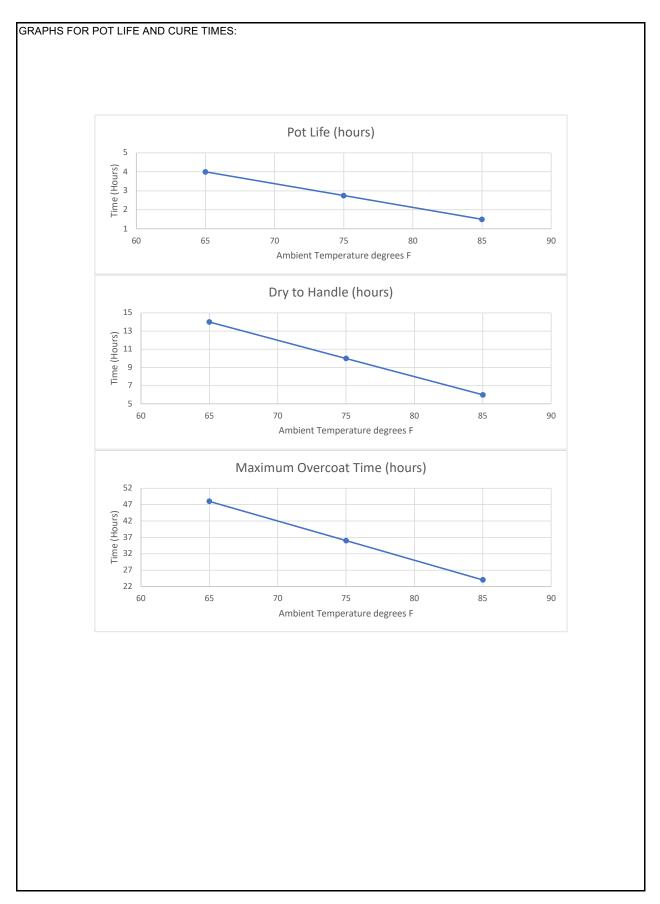
SUBSTRATE TEMPERATURE: $50^\circ F$ ($10^\circ C$) MIN. $90^\circ F$ ($32^\circ C$) MAX. AMBIENT TEMPERATURE: $50^\circ F$ ($10^\circ C$) MIN. $90^\circ F$ ($32^\circ C$) MAX. DIFFERENCE ABOVE THE DEW POINT: $5^\circ F$ ($3^\circ C$) MAXIMUM PERCENT RELATIVE HUMIDITY: $90^\circ F$

(b) FILM THICKNESS (SSPC PA2-73T): PER COAT:

4 mils WET MIN. 50 mils WET MAX.

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4 mils DRY MIN. 50 mils DRY MAX. TOTAL SYSTEM: N/A mils DRY MAX. 4 mils DRY MIN. (c) DRY TIMES (ASTM D1640): Minimum Overcoat Window: n/a Click to select time Interval @ 85 °F (29°C) n/a Click to select time Interval @ 75 °F (24°C) n/a Click to select time Interval @ 65 °F (18°C) Maximum Overcoat Window: 24 Hours @ 85 °F (29°C) 36 Hours @ 75 °F (24°C) 48 Hours @ 65 °F (18°C) Dry to Handle: 6 Hours @ 85 °F (29°C) 10 Hours @ 75 °F (24°C) 14 Hours @ 65 °F (18°C) Dry to Service: n/a Click to select time Interval @ 85 °F (29°C) n/a Click to select time Interval @ 70 °F (24°C) n/a Click to select time Interval @ 60 °F (18°C) Graphs included on page Click here to enter text or additional information included on page Click here to enter text (d) EQUIPMENT REQUIREMENTS: small jiffy blade for mixing and low speed drill, 1/4" nap roller or brush for application (e) SPECIAL INSTRUCTIONS: Click here to enter text IF OVERCOAT WINDOW HAS BEEN EXCEEDED FOR CRITICAL APPLICATIONS: If critical window has been exceeded, surface should be sanded to a 1-3 mil profile before applying next step IF OVERCOAT WINDOW HAS BEEN EXCEEDED FOR NON-CRITICAL APPLICATIONS: If critical window has been exceeded, surface should be sanded to a 1-3 mil profile before applying next step



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ADDITIONAL DATA/INSTRUCTIONS:
I. GENERIC TYPE AND DESCRIPTION: 100% solids, low odor epoxy material designed to assist underlayment & terrazzo adhesion and performance of BIO-DEK materials
II. MANUFACTURERS DATA: Click here to enter text
III. PROPERTIES: Click here to enter text
IV. SURFACE PREPARATION MINIMUM REQUIREMENTS: 1-3 mil. Surface profile. Surface must be clean, dry and free from flaking particulate
V. MIXING PROCEDURES: mix part A resin with Jiffy blade on low speed for 20-30 seconds then blend in part B and mix until homogeneous (1-2 minutes)
VI. APPLICATION: apply by brush or roller or squeegee – min. of 4 mils is recommended for best results