

# ASTM F 718

## SHIPBUILDERS AND MARINE PAINTS AND COATINGS PRODUCT/PROCEDURE DATA SHEET

I. GENERIC TYPE AND DESCRIPTION: BIO-DEK™ Epoxy Color Coat	Date: 08/25/2020
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™ Epoxy Color Coat	
(c) COLOR(S): various	
(d) USES: Color coat used as part of the BIO-DEK™ Decorative Color Flake System	
(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 ( <a href="#">Click here to enter text</a> ):	
Part A (Resin): >302 °F (>150 °C)	
Part B (Hardener): >302 °F (150 °C)	
(d) WEIGHT PER VOLUME (ASTM D1475):	
Part A (Resin) 9.2-9.4 lb/gal (1102-1125 g/L)	
Part B (Hardener) 8.3 lb/gal (994 g/L)	
(e) PERCENT EDGE RETENTION, IF REQUIRED BY APPLICABLE SPECIFICATION (N/A): <a href="#">Click here to enter text</a> %	
(f) SHELF LIFE: 24 Months	
(g) VISCOSITY ( <a href="#">Click here to enter text</a> ):	
Part A (Resin) : 600-1000 cp @ 70 °C ( 21 °F)	
Part B (Hardener) : 250 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	
(l) 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: .0056-.0057 lb/sq. ft. ( 27.35-27.83 g/m²)	
(n) SPECIAL PROPERTIES: <a href="#">Click here to enter text</a>	

IV. SURFACE PREPARATION MINIMUM REQUIREMENTS:

- (a) INITIAL CLEANLINESS: clean, dry and free of loose particulate.
- (b) TOUCH-UP CLEANLINESS: same as initial
- (c) PROFILE (1): 1 mils MIN. 5 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: 2.4:1 resin:hardner  
BY VOLUME: 2.2:1 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](#)  
  
.67 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°F (10°C) MIN. 90°F (32°C) MAX.  
AMBIENT TEMPERATURE: 50°F (10°C) MIN. 90°F (32°C) MAX.  
DIFFERENCE ABOVE THE DEW POINT: 5 °F ( 3 °C)  
MAXIMUM PERCENT RELATIVE HUMIDITY: 90 %
- (b) FILM THICKNESS (SSPC PA2-73T): PER COAT:  
4 mils WET MIN. 100 mils WET MAX.  
4 mils DRY MIN. 100 mils DRY MAX.  
TOTAL SYSTEM:

4 mils DRY MIN. 100 mils DRY MAX.

## (c) DRY TIMES (ASTM D1640):

## Minimum Overcoat Window:

4 Hours @ 90 °F (32°C)  
6 Hours @ 80 °F (27°C)  
8 Hours @ 70 °F (21°C)

## Maximum Overcoat Window:

24 Hours @ 90 °F (32°C)  
36 Hours @ 80 °F (27°C)  
48 Hours @ 70 °F (21°C)

## Dry to Handle:

4 Hours @ 90 °F (32°C)  
6 Hours @ 80 °F (27°C)  
8 Hours @ 70 °F (21°C)

## Dry to Service:

2 Days @ 90 °F (32°C)  
3 Days @ 80 °F (27°C)  
4 Days @ 70 °F (21°C)

Graphs included on page [Click here to enter text](#) or additional information included on page [Click here to enter text](#)

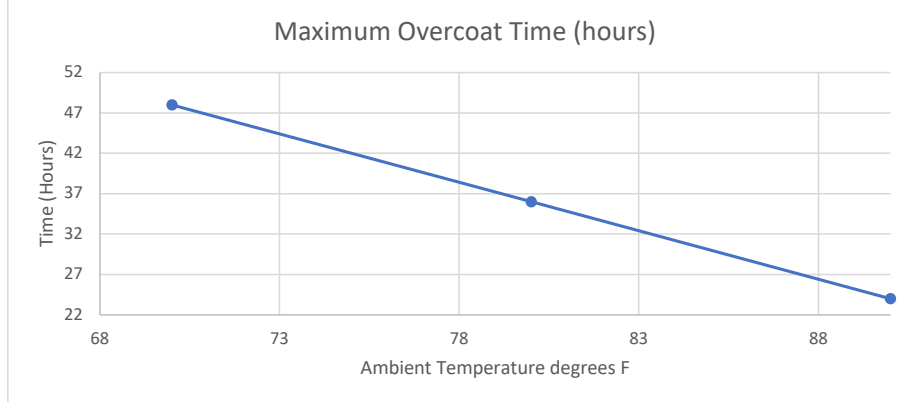
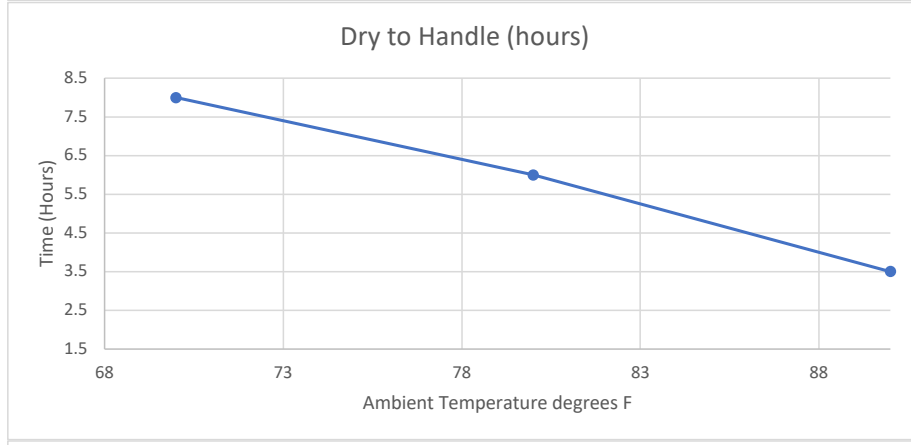
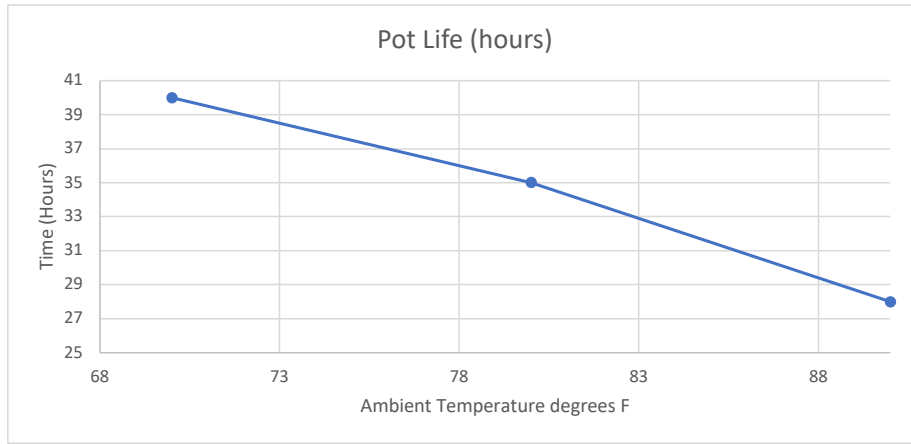
(d) EQUIPMENT REQUIREMENTS: small jiffy blade for mixing and low speed drill, ¼" nap roller, brush or squeegee for application

(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 minimum 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 a minimum 1-3 mil profile before applying next step

GRAPHS FOR POT LIFE AND CURE TIMES:



ADDITIONAL DATA/INSTRUCTIONS:

I. GENERIC TYPE AND DESCRIPTION: 100% solids, low odor colored epoxy material designed to provide a vibrant, consistent epoxy coating for floors

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 30-60 seconds then blend in part B and mix until homogeneous (1-2 minutes)

VI. APPLICATION: apply by brush or roller or squeegee