

ASTM F 718

SHIPBUILDERS AND MARINE PAINTS AND COATINGS PRODUCT/PROCEDURE DATA SHEET

I. GENERIC TYPE AND DESCRIPTION: Bio-Dek Underlayment Sealer	Date: 04/03/2020
Specification Number: MIL-PRF-3135H	
NOTE: For Type/Grade/Class/Application information see QPD-Type I,II, and III, class 2, grades A and B	
II. MANUFACTURERS DATA:	
(a) MANUFACTURER: BIO-DEK, LLC, 2827 Andrew Ave., Pascagoula, MS 39567	
(b) PRODUCT DESIGNATION: Bio-Dek Underlayment Sealer	
(c) COLOR(S): translucent clear	
(d) USES: epoxy designed to seal Bio-Dek "BUTTERR" Ultra Lightweight Underlayment	
(e) TECHNICAL SERVICE REPRESENTATIVE: Robert Holroyd 252-207-8988	
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) 8.4 lb/gal (1006 g/L)	
Part B (Hardener) 8.4 lb/gal (1006 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 : 2000 cps @ 21 °C (70 °F)	
Part B : 300 cps @ 21 °C (70 °F)	
(h) PACKAGING: Part A resin in gallon can, Part B hardener in quart can	
(i) NUMBER OF COMPONENTS: 2	
(j) GLOSS (ASTM D523): 60-90 GU	
(k) STORAGE REQUIREMENTS: TEMPERATURE: 50 °F (10 °C) MIN. 90 °F (32 °C) MAX.	
ADDITIONAL PAINT STORAGE REQUIREMENTS: should not be opened 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: .0054 lb/sq. ft. (26.36 g/m ²)	
(n) SPECIAL PROPERTIES:Low odor, easy to use formulation, can be applied by roller, brush or squeegee	

IV. SURFACE PREPARATION MINIMUM REQUIREMENTS:

- (a) INITIAL CLEANLINESS: clean, dry and free of loose particulate, designed to be applied over cured Bio-Dek underlayment
- (b) TOUCH-UP CLEANLINESS: same as initial
- (c) PROFILE (1): 1 mils MIN. 20 mils MAX.
- (d) SPECIAL INSTRUCTIONS: temperature will effect the working time and dry to full cure – profile can exceed 3 mils – this material is designed to fillin gaps and holes in underlayment materials
- (e) PRIMER REQUIREMENTS: designed to apply over cured underlayment. This material can work over other surfaces, but the minimum requirement for adhesion is a 1-3 mil. Surface profile
- (f) MAXIMUM ALLOWABLE CONDUCTIVITY ([Click here to enter text](#)):

Refer to NAVSEA Standard item 009-32
- (g) MAXIMUM DEGREE OF FLASH RUSTING ALLOWED: designed to apply over cured underlayment.

SPECIAL SAFETY PRECAUTIONS:
refer to MSDS

V. MIXING PROCEDURES

- (a) MIXING RATIOS BY WEIGHT: 2:1 A:B
BY VOLUME: 2:1 A:B
- (b) INDUCTION TIME: N/A Minutes
- (c) RECOMMENDED CLEANING SOLVENT (NO THINNING ALLOWED): none required
- (d) POT LIFE:[Click here to enter text](#)

.416 Hours @ 70 °F (21 °C)

Graphs included on page: [Click here to enter text](#)
- (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:
5 mils WET MIN. 50 mils WET MAX.
5 mils DRY MIN. 50 mils DRY MAX.
TOTAL SYSTEM:
60 mils DRY MIN. 3000 mils DRY MAX.

(c) DRY TIMES (ASTM D1640):

Minimum Overcoat Window:

3 Hours @ 80 °F (27°C)
5 Hours @ 70 °F (21°C)
7 Hours @ 60 °F (15.5°C)

Maximum Overcoat Window:

24 Hours @ 80 °F (27°C)
36 Hours @ 70 °F (21°C)
48 Hours @ 60 °F (15.5°C)

Dry to Handle:

3 Hours @ 80 °F (27°C)
5 Hours @ 70 °F (21°C)
7 Hours @ 60 °F (15.5°C)

Dry to Service:

2 Days @ 80 °F (27°C)
3 Days @ 70 °F (21°C)
4 Days @ 60 °F (15.5°C)

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

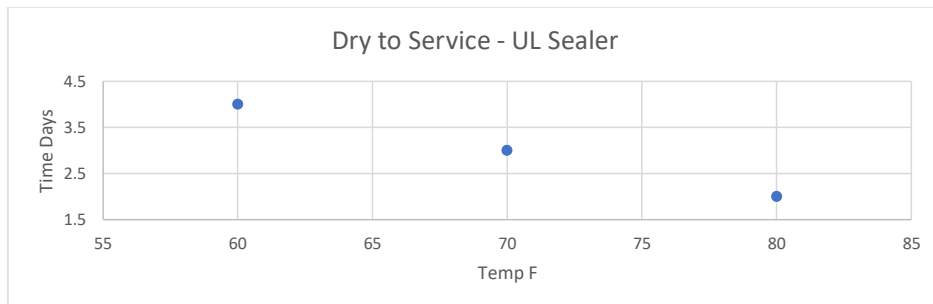
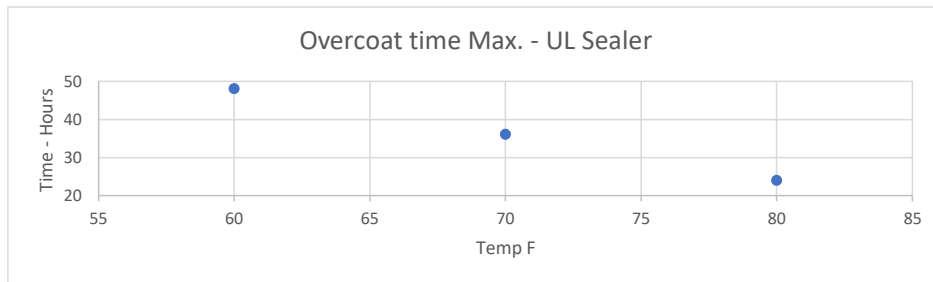
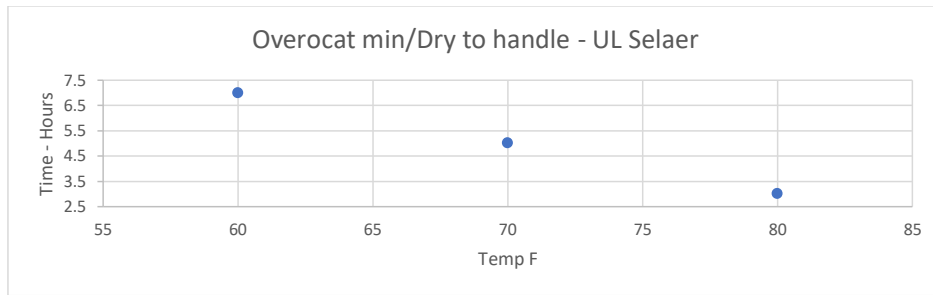
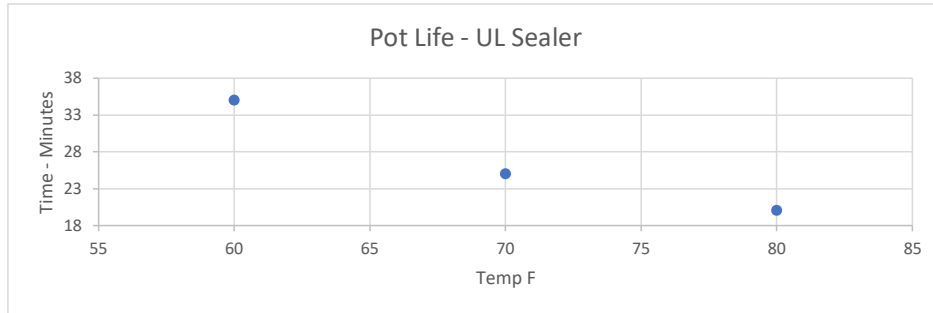
- (d) EQUIPMENT REQUIREMENTS: Jiffy blade and mixer for mixing, for applicaiton 1/4-3/8" nap or similar solvent resistant, phenolic core roller, high quality synthetic bristle brush or high quality plastic or rubber squeegee

- (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 1 matte 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 1 matte 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 epoxy material designed to seal underlayment

II. MANUFACTURERS DATA: [Click here to enter text](#)

III. PROPERTIES: [Click here to enter text](#)

IV. SURFACE PREPARATION MINIMUM REQUIREMENTS: Surface must be clean, dry and free from flaking particulate. Designed to fill in gaps and holidays in troweled underlayment

V. MIXING PROCEDURES: mix BIO-DEK Underlayment Sealer Part A with a mechanical mixer using a Jiffy blade until a homogeneous mixture is evident. Mix in BIO-DEK Underlayment Sealer Part B using the same mechanical mixer for 1.5 minutes. Material can be applied by roller, brush or squeegee. Use 1/4-3/8" nap or similar solvent resistant, phenolic core roller, high quality synthetic bristle brush or high quality plastic or rubber squeegee

VI. APPLICATION: apply by brush, roller, or squeegee