

SHIPBUILDERS AND MARINE ASTM F-718

PAINTS AND COATINGS

PRODUCT /	PROCEDURE DATA SHEET NO. MS-11CZ-LT	Last Updated:	1-31-2008
I.	GENERIC TYPE AND DESCRIPTION: Low Temperature Primer - Type VIII Epoxy - Polyamine Non-Skid Deck Coating – 90-96% Solids Specification Number (If Applicable): MIL-PRF-24667B		
II.	MANUFACTURERS		
(a)	MANUFACTURER: ITW American Safety Technologies 565 Eagle Rock Avenue, Roseland, NJ 07068	(b)	PRODUCT DESIGNATION:
(c)	COLOR(S): Gray - 36118, Buff - No Fed std, Haze Gray -36270	(d)	USES: Non-skid Deck Coating General Use
(e)	TECHNICAL SERVICE REPRESENTATIVE: (Include Telephone No.): 800-631-7841/Fax: 215-855-4688 E-MAIL: SALES@ITWPOLYTECH.COM WEBSITE: WWW.ITWAST.COM	(f)	NOT RECOMMENDED FOR: N/A
III.	PROPERTIES:		
(a)	% VOL. SOLIDS (ASTM D2697): 90-96%	(b)	FLASH POINT (ASTM D93): >102F (39C) OR (ASTM D56): >102F (39C)
(c)	WT. PER GAL. (FTMS 141_a 4184.1): 11.92 ± .2 lbs	(d)	SHELF LIFE: 1 Year Per MIL-PRF-24667B
(e)	VISCOSITY (FTMS 141_a 4281): 2,000-3,500 cps 75°F (Thixotropic)	(f)	PACKAGING: 3 gals in 6 ½ gal. pails
(g)	NUMBER OF COMPONENTS: 2	(h)	GLOSS (ASTM D523): N/A
(i)	STORAGE REQUIREMENTS: 24 HRS PRIOR TO MIXING: (Colder temperatures will extend cure time)	TEMP.	MIN. 40°F MAX. 100°F (Long Term) MIN. 60°F MAX. 80°F
SPECIAL SAFETY PRECAUTIONS: PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: WARNING! IRRITANT. Read MSDS before use. Do not get in eyes. Avoid contact with skin and clothing. Avoid inhalation vapor or mist. Use with adequate ventilation. Wash thoroughly after handling, and before eating, drinking or smoking. Remove contaminated clothing and wash before use. OTHER PRECAUTIONS: Avoid extreme heat - keep away from flame.			
IV.	SURFACE PREPARATION MINIMUM REQUIREMENTS (USE SPECIFIC STANDARD NUMBER(S)):		
(a)	INITIAL – Remove grease, oil, and dirt (SSPC-SP1) or other approved method followed by grit or shot blasting.		
(b)	TOUCH-UP – For deck edges, hard to reach areas and for areas not to receive non-skid, use power tool cleaning to bare metal, SSPC-SP11 is recommended		
(c)	PROFILE: - Abrasive Blasting UHP Water Jetting	MIN. SSPC-10/NACE 2 NACE 5/SSPC SP 12/WJ-2/NV-2	MAX. SSPC-5/NACE 1
NOTE: Cleaning via UHP-WJ does not create an anchor tooth profile. The substrate may require abrasive blasting in order to produce an acceptable minimum or specified anchor tooth profile prior to application of primer.			
(d)	SPECIAL INSTRUCTIONS – Substrate Anchor Tooth Profile: A minimum of 2 mils anchor tooth profile is required for all areas designated to receive non-skid on both critical and non-critical decks. An anchor tooth profile depth of 3-4.5 mils is required for the application of non-skid coatings systems on Aircraft Carrier flight and Hangar decks. Application of non-skid coatings systems on substrates which exhibit anchor tooth profile depths greater than 7 mils deep is not recommended.		
PRIMER REQUIREMENTS (IF APPLICABLE): Should be applied between 2-3 mils (DFT) above the averaged anchor tooth profile.			

- V. MIXING PROCEDURE: **NOTE: Incorrectly mixed material will not cure properly**
- (a) MIX RATIO BY WEIGHT – 3.31:1 (Base to Hardener)
MIX RATIO BY VOLUME – 1.94:1 (Base to Hardener)
- (b) INDUCTION TIME – NONE
- (c) RECOMMENDED SOLVENT – THINNING – Not Authorized
CONFINED AREAS – N/A
NON-CONFINED AREAS – N/A
CLEAN-UP – 1) Aromatic Naptha
2) N-Methyl Amyl Ketone (MAK)
3) S-426 Solvent
- (d) THINNING REQUIREMENTS (RATIO) – Not Applicable
- (e) POT LIFE – 20 MIN @ 70°F (21°C) in 3 gallon mass. Optimal spraying time less than 20 minutes.
GEL TIME - One Hour @ 70°F (21°C) in 3 gallon mass.
- (f) SPECIAL INSTRUCTIONS – Pre-mix Part A, base component, to ensure all materials which may have settled during storage are lifted from the bottom. **Mix Part A and Part B components together for a minimum of 3 to 5 minutes ensuring the mixed material assumes a uniform color and appearance.**

VI. APPLICATION: **NOTE: Environmental conditions must be taken into consideration when determining curing time of epoxy coatings. Cooler temperatures extend curing times, warmer temperature shortens curing times. SEE SPECIAL APPLICATION INSTRUCTIONS BELOW.**

(a) ENVIRONMENTAL LIMITATIONS:

AIR TEMP. MIN. 35°F	MAX. 65°F
% RELATIVE HUMIDITY MIN. 0%	MAX. 85%

(b) FILM THICKNESS (SSPC PA2-73T) WET MIN. 3 mils WET MAX. 10 mils
DRY MIN. 2 mils DRY MAX. 9.5 mils

(c) DRY TIMES (ASTM D1650)

One Coat of Primer with or without Stripe Coats to RECOAT with NON-SKID

MIN.	3 HRS	@	90°F (32°C)	@	50% R.H.
MIN.	6 HRS	@	70°F (21°C)	@	50% R.H.
MIN.	12 HRS	@	50°F (10°C)	@	50% R.H.
MIN.	24 HRS	@	35°F (1.6°C)	@	50% R.H.
MAX.	96 HRS	@	35°F (1.6°C)	@	50% R.H.
MAX.	72 HRS	@	50°F (10°C)	@	50% R.H.
MAX.	24 HRS	@	70°F (21°C)	@	50% R.H.
MAX.	6 HRS	@	90°F (32°C)	@	50% R.H.

(d) **EQUIPMENT REQUIREMENTS (INCLUDE PREFERRED, SUITABLE AND NOT SUITABLE REQUIREMENTS):**
Spray, Roller or Brush. ½ HP mechanical mixer and suitable mixing blade

IMPORTANT – When using multiple coats of primer for additional corrosion resistance it is recommended to use additional drying times between coats to ensure a full dry. **A two coat primer process is not recommended for CV/CVN tail hook impact areas.** Stripe coating is intended for filling voids, spots and porous metal on deck edges, edges of deck protrusions, and weld beads. Use a brush or roller to apply the stripe coat. The stripe coat may be applied to the prepared metal surface of applied over a full primer coat. The primer may coat the stripe coat while wet dry or dry to touch. **NOTE:** “While wet” is prohibited by NAVSEA for all products covered under MIL-PRF-24667B QPL.

SPECIAL APPLICATION INSTRUCTION: Low temperature curing coatings have a shorter optimal spraying time when compared to regular primers. The primer should be sprayed out of the pot in a timely manner, preferably within 10 - 15 minutes after mixing. Low temperature primers may be rolled for up to 30 - 45 minutes if needed. Please note: 1) Do not apply when deck temperature is under 35°F or over 90°F. 2) At time of application, in accordance with MIL-PRF-24667B, MATERIAL TEMPERATURE should be no lower than 60°F or higher than 80°F. 3) Caution should be taken that the surface temperature is at least 5°F above the dew point at application.

NOTE: MS-11CZ-LT is formulated to be applied within the parameters listed on this document. MIL-PRF-24667B QPL applications may adjust the environmental and application procedures recommended by this ASTM F 718.