NAVSEA REVIEWED ASTM F-718

ITW American Safety Technologies

MS-375G Epoxy Non-Skid

MIL-PRF-24667

If this product is to be applied as part of a coating system, all components of the system must be as listed on the QPL.

This NAVSEA-REVIEWED ASTM F-718 data sheet is the only data sheet approved for use when utilizing this coating for U.S. Navy preservation projects. NAVSEA's review covers only the application process for the material. The review does not denote the material as a qualified product, nor does it constitute an approval for purchase/procurement of the material. For products on the Qualified Products List (QPL) for this MILSPEC, please refer to http://gpldocs.dla.mil/search/default.aspx.

Questions regarding modifications or updates of this ASTM F-718 shall be directed toward:

NSWCPD

NSWCPD_ASTM_F718.fct@navy.mil

SHIPBUILDERS AND MARINE ASTM F-718

PAINTS AND COATINGS PRODUCT / PROCEDURE DATA SHEET NO.__

MS-375G

Ι.	GENERIC TYPE AND DESCRIPTION: Epoxy - Non-Skid De Specification Number (If Applicable): MIL-PRF-24667	eck Coati	ng		
II.	MANUFACTURERS DATA:				
(a)	MANUFACTURER: ITW American Safety Technologies	(b)	PRODUCT DESIGNATION: MS-375G		
(c)	COLOR(S): Standard Color Fed. Std. 595: Dark Gray 36076 (Custom colors Fed. Std. 595: 36270, 31136, 34087, 37038)	(d)	USES: Non-Skid Deck Coating		
(e)	TECHNICAL SERVICE REPRESENTATIVE: (Include Telephone No.): 800-631-7841/Fax: 973-403-1108 E-MAIL: info@americansafetytech.com	(f)	NOT RECOMMENDED FOR: CV/CVN landing areas due to abrasive aggregate		
111.	PROPERTIES:				
(a)	% VOL. SOLIDS (ASTM D2697): 67 ± 1%	(b)	FLASH POINT(ASTM D93):>102°F (39C) OR (ASTM D56): >102°F (39C)		
(c)	WT. PER GAL. (FTMS 141 _a 4184.1): 17 ± .3 lbs.	(d)	SHELF LIFE: 1 Year non-extendable per MIL-PRF-24667A/B		
(e)	VISCOSITY (FTMS 141 _a 4281):28000-34000cps 75°F (Thixotropic)	(f)	PACKAGING: 5 gals. in 6 ¹ / ₂ gal. pails		
(g)	NUMBER OF COMPONENTS: 2	(h)	GLOSS (ASTM D523): N/A		
(i)	STORAGE REQUIREMENTS:TEMP.24 hrs. prior to mixingMIN 705	MIN. <u>4</u> °F MAX	<u>0°F</u> MAX. <u>100°F</u> (Long Term) 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 or other ignition source .				
IV.	SURFACE PREPARATION MINIMUM REQUIREMENTS (U	SE SPEC	IFIC 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 a SP11 is recommended.	reas not t	o receive non-skid, use power tool cleaning to bare metal, SSPC-		
(c)	PROFILE: - Abrasive Blasting MIN. <u>SSP</u> UHP Water Jetting NAC	PC-10/NA CE5/SSP	<u>CE 2</u> MAX. <u>SSPC-5/NACE 1</u> <u>C SP12/ WJ-2/NV-2</u>		
	<u>NOTE</u> : Cleaning via UHP-WJ does not create an anchor tool order to produce an acceptable minimum or specified anchor	th profile. r tooth pro	The substrate may require abrasive blasting in file prior to application of an approved primer.		
(d)	SPECIAL INSTRUCTIONS - Substrate Anchor Tooth Profile areas designated to receive nonskid on both critical and non- is required for the application of nonskid coatings systems or nonskid coatings systems on substrates which exhibit ancho recommended.	: A minim -critical de n Aircraft r tooth pre	um of 2 mils anchor tooth profile is required for all ecks. An anchor tooth profile depth of 3 – 4.5 mils Carrier flight and hangar decks. Application of ofile depths greater than 7 mils deep is not		
	PRIMER REQUIREMENTS (IF APPLICABLE): ITW America 3 mils minimum DFT, above the averaged anchor tooth profil	an Safety le.	Technologies MS-7C/MS-7CZ primer should be applied at 2-		

ITW AST MS-375G

	III.	MIXING PROCEDURE: NOTE: Incorrectly mixed material will not cure properly
	(a)	MIXING RATIO BY WEIGHT - 20 : 1 (Base to hardener) BY VOLUME - 9 : 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) Propylene Glycol Ether 2) N-Methyl Amyl Ketone (MAK) 3) Aromatic Naphtha
	(d)	THINNING REQUIREMENTS (RATIO) - Not Applicable
	(e)	POT LIFE - 4 Hrs @ {90^\circ} F ({32C}) 8 Hrs @ {70^\circ} F ({21C}) 12 Hrs @ {50^\circ} F ({10C})
	(f)	SPECIAL INSTRUCTIONS -
		See last page for mixing equipment and instructions.
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	IV.	APPLICATION: <u>NOTE</u> : Environmental conditions must be taken into consideration when determining curing time of epoxy coatings. Cooler temperatures extend curing times, warmer temperature shortens curing times.
	(a)	ENVIRONMENTAL LIMITATIONS:
	(b)	AVERAGE FILM THICKNESS (SSPC PA2-73T) Spread Rate: Type II: 25 - 35 sq. ft./gal Type IV: < 60 sq. ft./gal
		Note: Spread rate per gallon is subject to variation due to environmental conditions and applicator technique.
	(c)	DRY TIMES (ASTM D1650) - RECOAT MIN. <u>48</u> Hrs @ <u>90°</u> F (<u>32</u> C) @ <u>50</u> % R.H. MIN. <u>96</u> Hrs @ <u>70°</u> F (<u>21</u> C) @ <u>50</u> % R.H. MIN. <u>180</u> Hrs @ <u>50°</u> F(<u>10C</u>) @ <u>50</u> % R.H.
		$MAX \qquad Hrs @ \ ^{\circ}E(\ ^{\circ}C)$
		$\begin{array}{c} \text{MIN.} \underline{-12} \text{ His } \underline{0} \underline{-50} \text{ (} \underline{-52} \text{ (} \underline{0} \underline{-50} \text{ (} \underline{8} \text{ (} \underline{11} \text{ (}$
		MIN. <u>48</u> Hrs @ <u>50°</u> F (<u>10</u> C) @ <u>50</u> % R.H.
		-FOR IMMERSION MIN. <u>72</u> Hrs @ <u>90°</u> F (<u>32</u> C) MIN. <u>96</u> Hrs @ <u>70°</u> F (<u>21</u> C)
		MIN. <u>180</u> Hrs @ <u>50°</u> F (<u>10</u> C)
		MAX Hrs @°F (C)
	(d)	EQUIPMENT REQUIREMENTS (INCLUDE PREFERRED, SUITABLE AND NOT SUITABLE REQUIREMENTS): Phenolic hard core roller with extended handle; #3/4", 3/4 HP, 450 RPM power mixer capable of mixing heavy, mastic materials.
		SPECIAL INSTRUCTIONS:
		Caution should be taken that the surface temperature is at least 5° F above the dew point at application.
		NOTE: MS-375G is formulated to be applied within the parameters listed on this document. MIL-PRF-24667 QPL
		applications may adjust the environmental and application procedures recommended by this ASTM-F718.

Section V. (f) Special Instructions

ITW American Safety Technologies: Recommended Equipment and Mixing Instructions for Nonskid

Blade: Jiffy Mixer PS-1 blade (www.Jiffymixer.com) or ASTI approved equivalent blade with a 20-24 inch shaft suitable for mixing heavy, mastic materials.

Mixer: 3/4 Inch Drive such as a Milwaukee 3/4 Inch Super Hole-Shooter or equivalent

HP of drill: 3/4 HP minimum

Rpm Requirements: - 350 - 500 maximum

Required pre-mixing time for Part A component only: 2 - 3 minutes

Required mixing time for resin base & hardener in pail: 3 - 5 minutes

Mixing Instructions:

- 1) Pre-mix base component. Make sure all settlement is lifted off the bottom of the container and is uniformly dispersed in the material by traversing the bottom and side of the pail.
- 2) Add entire contents of hardener bag into the resin base material. Mix hardener and base material for 3-5 minutes constantly moving the blade up, down and around inside the mixing container being sure to scour the bottom and sides of the pail until material assumes a uniform color, consistency and appearance.
- 3) Material should be applied to the deck within 5 to 10 minutes. NOTE: Pails should not be left for extended periods of time once mixed as this could cause variations in appearance in the cured deck.