NAVSEA REVIEWED ASTM F-718

Holcim Products and Solutions US LLC / American Safety Technologies

MS-8CZ, Two component high solids, epoxy polyamide based primer

PRODUCT DESIGNATION

Part A: MS720R DK Gray, MS721R Buff, MS722R Haze Gray

Part B: MS720H

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 https://qpldocs.dla.mil/search/default.aspx.

Questions regarding modifications or updates of this ASTM F-718 shall be directed toward: NSWCPD at <u>NavseaReviewedf718@us.navy.mil.</u>

Spe NO	ccification Number: MIL-PRF-24667 TE: For Type/Grade/Class/Application information see QPD-24667
II. MA	NUFACTURERS DATA:
(a)	MANUFACTURER: Holcim Products and Solutions US LLC / American Safety Technologies, 12055 Cutten Road, Houstor TX 77066
(b)	PRODUCT DESIGNATION: MS-8CZ Part A: MS720R DK Gray, MS721R Buff, MS722R Haze Gray; Part B: MS720H. Coatings sold in kit form designated with a "K" suffix which contain both Part A and Part B (ie MS720K Dk Gray Kit, MS721 Buff Kit and MS722K Haze Gray Kit).
(c)	COLOR(S): Dark Gray, Buff, Haze Gray
(d)	USES: Primer to be used with Holcim/American Safety Technologies Exterior and Interior Decking Systems
(e)	TECHNICAL SERVICE REPRESENTATIVE:): 800-878-7876, Fax: 972-554-3939, Email: holcimacs.orders1@holcim.com web site: www.holcimast.com.
III. PR	
(a)	PERCENT VOLUME SOLIDS (ASTM D2697): 90.5 +7-2 %
(b)	PERCENT WEIGHT SOLIDS (ASTM D2369): 94.5 +/- 2 %
(c)	FLASH POINT (ASTM D3278):
	Part A: >102 °F (39 °C)
	Part B: >105 °F (40 °C)
(d)	WEIGHT PER VOLUME (ASTM D1475):
	Part A: 14.0 lb/gal (1677 g/L)
	Part B: 8.1 lb/gal (970 g/L)
	Mixed: 12.4 lb/gal (1486 g/L)
(e)	PERCENT EDGE RETENTION, IF REQUIRED BY APPLICABLE SPECIFICATION (Click here to enter text): N/A %
(f)	SHELF LIFE: 12 Months
(g)	VISCOSITY (ASTM D2198):
	Part A : ~3000 cps @ 21 °C (70 °F)
	Part B : ~125 cps @ 21 °C (70 °F)
-	Mixed : ~2000 cps @ 21 °C (70 °F)
(h)	PACKAGING: Part A: 3.75 gallons in 6 ½ gallon pail, Part B: 1.25 gallons in a 1.3-gallon (5 liter) bag
(i)	NUMBER OF COMPONENTS: 2
(j)	GLOSS (ASTM D523): N/A GU
(k)	STORAGE REQUIREMENTS: TEMPERATURE: 40 °F (4.4 °C) MIN. 100 °F (37.7 °C) MAX.
	ADDITIONAL PAINT STORAGE REQUIREMENTS: 24 HOURS PRIOR TO MIX: TEMP. MIN. 50°F (10°C) MAX. 90°F (32.2°C)

4	VOLATILE ORGANIC CONFOUNDS (VOCS-EPATEST METHOD 24): U.69 ID/gal (83 g/L)						
(m)	WEIGHT PER AREA OF DRY FILM AT 1 MIL THICKNESS: 0.0080 lb/sq. ft. (3.6 g/m ²)						
(n)	SPECIAL PROPERTIES: Anti-Corrosive, Zinc Complex Epoxy Primer (Contains 0% Free Zinc Metal).						
IV. SU	RFACE PREPARATION MINIMUM REQUIREMENTS:						
(4)	plasting or UHP water jetting. MIN: SSPC-SP10/NACE 2. UHP Water Jetting – SSPC-SP WJ-2/NACE WJ-2						
(b)	TOUCH-UP CLEANLINESS: For deck edges, hard to reach areas and for areas not to receive nonskid, use power tool cleaning to bare metal per SSPC SP-11. A minimum anchor tooth profile of 2 mils is required.						
(c)	PROFILE (ASTM D4417 Method B or C): 3 mils MIN. 6 mils MAX.						
(d)	SPECIAL INSTRUCTIONS: (ASTM D4417 Method B or C): MIN. 3 MILS MAX. 6 MILS Application of nonskid coating systems on substrates which exhibit anchor tooth profile depths greater than 7 mils deep is not recommended.						
(e)) PRIMER REQUIREMENTS: N/A						
(f)	MAXIMUM ALLOWABLE CONDUCTIVITY (BRESLE PATCH METHOD ISO 8502-9):						
	70μS/cm for non-submersible structures						
(g)	MAXIMUM DEGREE OF FLASH RUSTING ALLOWED: LIGHT (NACE WJ-2/SSPC-SP WJ-2)						
CAL avo hanc	SPECIAL SAFETY PRECAUTIONS: JTIONS TO BE TAKEN IN HANDLING AND STORING: WARNING! IRRITANT, Read MSDS before use. Do not get in eye id contact with skin and clothing, and avoid inhalation of vapor or mist. Use with adequate ventilation, wash thoroughly after illing and before eating, drinking or smoking. Remove contaminated clothing and wash before use. OTHER PRECAUTION Avoid extreme heat – keep away from flame or other ignition source.						
CAL avo hand	SPECIAL SAFETY PRECAUTIONS: ITIONS TO BE TAKEN IN HANDLING AND STORING; WARNING! IRRITANT, Read MSDS before use. Do not get in eye id contact with skin and clothing, and avoid inhalation of vapor or mist. Use with adequate ventilation, wash thoroughly after Iling and before eating, drinking or smoking. Remove contaminated clothing and wash before use. OTHER PRECAUTION Avoid extreme heat – keep away from flame or other ignition source.						
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CAL avo hand V. MIX (a)	SPECIAL SAFETY PRECAUTIONS: JTIONS TO BE TAKEN IN HANDLING AND STORING: WARNING! IRRITANT, Read MSDS before use. Do not get in eye id contact with skin and clothing, and avoid inhalation of vapor or mist. Use with adequate ventilation, wash thoroughly after dling and before eating, drinking or smoking. Remove contaminated clothing and wash before use. OTHER PRECAUTION Avoid extreme heat – keep away from flame or other ignition source.						
CAL avo hand V. MIX (a) (b)	SPECIAL SAFETY PRECAUTIONS: ITIONS TO BE TAKEN IN HANDLING AND STORING: WARNING! IRRITANT, Read MSDS before use. Do not get in eye id contact with skin and clothing, and avoid inhalation of vapor or mist. Use with adequate ventilation, wash thoroughly after dling and before eating, drinking or smoking. Remove contaminated clothing and wash before use. OTHER PRECAUTION Avoid extreme heat – keep away from flame or other ignition source. KING PROCEDURES MIXING RATIOS BY WEIGHT: 4.82:1 (Part A to Part B) BY VOLUME: 2.8:1 (Part A to Part B) INDUCTION TIME: N/A Minutes						
CAL avo hand V. MIX (a) (b) (c)	SPECIAL SAFETY PRECAUTIONS: ITIONS TO BE TAKEN IN HANDLING AND STORING: WARNING! IRRITANT, Read MSDS before use. Do not get in eye id contact with skin and clothing, and avoid inhalation of vapor or mist. Use with adequate ventilation, wash thoroughly after alling and before eating, drinking or smoking. Remove contaminated clothing and wash before use. OTHER PRECAUTION Avoid extreme heat – keep away from flame or other ignition source. ING PROCEDURES MIXING RATIOS BY WEIGHT: 4.82:1 (Part A to Part B) BY VOLUME: 2.8:1 (Part A to Part B) INDUCTION TIME: N/A Minutes RECOMMENDED CLEANING SOLVENT (NO THINNING ALLOWED): S-31 Solvent, S-426 Solvent, Isopropyl Alroabel Aromatic Naphtha, MAK						
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CAL avc hand (b) (c) (d)	SPECIAL SAFETY PRECAUTIONS: ITIONS TO BE TAKEN IN HANDLING AND STORING; WARNING! IRRITANT, Read MSDS before use. Do not get in eye id contact with skin and clothing, and avoid inhalation of vapor or mist. Use with adequate ventilation, wash thoroughly after thing and before eating, drinking or smoking. Remove contaminated clothing and wash before use. OTHER PRECAUTION: Avoid extreme heat – keep away from flame or other ignition source. KING PROCEDURES MIXING RATIOS BY WEIGHT: 4.82:1 (Part A to Part B) BY VOLUME: 2.8:1 (Part A to Part B) INDUCTION TIME: N/A Minutes RECOMMENDED CLEANING SOLVENT (NO THINNING ALLOWED): S-31 Solvent, S-426 Solvent, Isopropyl Alcohol, Aromatic Naphtha, MAK POT LIFE:Click here to enter text 1.5 Hours @ 50 °F (10 °C) 1 Hours @ 70 °F (21 °C) 0.5 Hours @ 90 °F (32.2 °C) Click to select time Interval						

	are lifted from the bottom. Using a clean mixing paddle and adequate mechanical mixer, mix Part A and Part B components together for a minimum of 3 minutes or until the mixed material assumes a uniform color and appearance. Warning-Improperly mixed material will not cure properly.					
VI. AF	PLICATION:					
(a)	ENVIRONMENTAL LIMITATIONS: SUBSTRATE TEMPERATURE: 50°F (10°C) MIN. 120°F (48.9°C) MAX. AMBIENT TEMPERATURE: 50°F (10°C) MIN. 100°F (37.7°C) MAX. DIFFERENCE ABOVE THE DEW POINT: 5 °F (2.8 °C) MAXIMUM PERCENT RELATIVE HUMIDITY: 85 %					
(b)	FILM THICKNESS (SSPC PA2-73T): PER COAT: 3 mils WET MIN. 10 mils WET MAX. 3 mils DRY MIN. 9 mils DRY MAX.					
	N/A mils DRY MIN. 14 mils DRY MAX.					
	(See Section VI (e) below for additional guidance on total film thickness.)					
(c)	DRY TIMES (ASTM D1640):					
	Minimum Overcoat Window:					
	24 Hours @ 50 °F(10°C) 12 Hours @ 70 °F(21°C) 6 Hours @ 90 °F(32.2°C)					
	Maximum Overcoat Window:					
	28 Days @ 50 °F (10°C) 14 Days @ 70 °F (21°C) 7 Days @ 90 °F (32.2°C)					
	Dry to Handle:					
	N/A Click to select time Interval @ Click here to enter text °F (Click here to enter text°C) N/A Click to select time Interval @ Click here to enter text °F (Click here to enter text°C) N/A Click to select time Interval @ Click here to enter text °F (Click here to enter text°C)					
	Dry to Service:					
	14 Days @ 50 °F (10°C) 7 Days @ 70 °F (21°C) 5 Days @ 90 °F (32.2°C)					
	Graphs included on page N/A or additional information included on page 3-4					
(d)	EQUIPMENT REQUIREMENTS: Spray, Roller, or Brush, ½ HP mechanical mixer and suitable mixing blade.					
(e)	SPECIAL INSTRUCTIONS: Ensure minimum total dry film thickness is greater than the anchor tooth profile.					
	IF OVERCOAT WINDOW HAS BEEN EXCEEDED FOR CRITICAL APPLICATIONS: CRITICAL APPLICATIONS RECEIVING NONSKID: If nonskid has not been applied within 72-hour window over cured primer, you must abrade, solver wipe per SSPC-SP1. Allow the solvent to fully dry before applying a mist coat of primer. Once the primer is sufficiently dried, apply nonskid coating. If more than 7 days have elapsed following observance of primer minimum cure schedule, remove primer to bare metal and re-apply new primer coat. CRITICAL APPLICATIONS NOT RECEIVING NONSKID: This					

SHIPBUILDERS AND MARINE PAINTS AND COATINGS PRODUCT/PROCEDURE DATA SHEET

deck edge coaming, drains and fixtures. If less than 7 days has elapsed since the application of the primer coat, perform a complete cleaning by solvent wipe down of the primed area to be overcoated. After day 7 and up to day 30, if the next coat has not been applied, the entire surface shall be cleaned in accordance with SSPC-SP1. Ensure the surface has fully dried following solvent cleaning, and then lightly abrade with abrasive blast, power sanding, or hand sanding using 80-120 grit. Perform a solvent re-clean of the abraded surface and allow any visible traces of solvent to fully evaporate. After solvent cleaning (ensuring surfaces have completely dried and all solvent has evaporated) and after visual inspection confirms the absence of surface contaminants, proprietary primer or color topping may be applied.

IF OVERCOAT WINDOW HAS BEEN EXCEEDED FOR NON-CRITICAL APPLICATIONS: If less than 7 days has elapsed since the application of the primer coat, perform a complete cleaning by solvent wipe down of the primed area to be overcoated. After solvent cleaning (ensuring surfaces have completely dried and all solvent has evaporated) and after visual inspection confirms the absence of surface contaminants, a proprietary primer, nonskid, or color topping may be applied. After day 7 and up to day 30, if the next coat has not been applied, the entire surface shall be cleaned in accordance with SSPC-SP1. Ensure the surface has fully dried following solvent cleaning and then lightly abrade with abrasive blast, power sanding or by hand sanding using 80-120 grit. Perform a solvent re-clean of the abraded surface and allow any visible traces of solvent to fully evaporate. Apply a tack coat (2-3 mils/ 50-75 microns WFT) of proprietary primer. Minimum overcoat dry times for application of a "tack coat" applied to a primer coat shall be those indicated within the Dry Time table in section VI (c).

GRAPHS F	R PUT LIFE AND CURE TIME	:5:		
100 90 00 101 102 102 103 100 100 100 100 100 100 100 100 100	Pot Life	e vs Temperature		
0	50°F Co	70°F Dating Temperature Pot Life (Minutes)	90°F	
ADDITIONA I. GENERIC II. MANUFA	DATA/INSTRUCTIONS: TYPE AND DESCRIPTION: N/ TURERS DATA: N/A	A		
III. PROPEF	IES: N/A			
IV. SURFAC	PREPARATION MINIMUM R	EQUIREMENTS: N/A		
V. MIXING F	ROCEDURES: N/A			
VI. APPLICA	FION: N/A			