

SHIPBUILDERS AND MARINE ASTM F-718

PAINTS AND COATINGS

**MS-275**

PRODUCT / PROCEDURE DATA SHEET NO.

|          |            |
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| Updated: | 11-14-2007 |
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| I.  | <p>GENERIC TYPE AND DESCRIPTION: Two component UV Resistant Water Based Epoxy for VLA &amp; Flight Deck Toppings. Specification Number (If Applicable): MIL-PRF-24667B</p>   |   |
| II.   | <p>MANUFACTURERS</p>   |   |
| (a)   | <p>MANUFACTURER:<br/>ITW American Safety Technologies</p>  | (b) PRODUCT DESIGNATION:<br><b>MS-275</b>                                     |
| (c)   | <p>COLOR(S): Gray 36076, White 37875.<br/>Yellow 33538, Red 31136, Green 14062</p>   | (d) USES: Non-skid Marking & Topping  |
| (e)   | <p>TECHNICAL SERVICE REPRESENTATIVE:<br/>(Include Telephone No.): 800-631-7841/Fax: 215-855-4688<br/>E-MAIL: sales@itwpolytech.com</p>   | (f) NOT RECOMMENDED FOR:  |
| III.  | <p>PROPERTIES:</p>   |   |
| (a)   | % VOL. SOLIDS (ASTM D2697): 45 – 50 %  | (b) FLASH POINT (ASTM D93):>200   |
| (c)   | WT. PER GAL. (FTMS 141 <sub>a</sub> 4184.1): 9.4 +/- .5 lbs.   | (d) SHELF LIFE: 1 Year Per MIL-PRF-24667B                                     |
| (e)   | VISCOSITY (FTMS 141 <sub>a</sub> 4281): 2000-6000 @ 75°F   | (f) PACKAGING: 1 & 5 gal. kits  |
| (g)   | NUMBER OF COMPONENTS: 2  | (h) GLOSS (ASTM D523): Semi-Gloss   |
| (i)   | <p>STORAGE REQUIREMENTS:<br/>24 HRS PRIOR TO MIXING:</p>   | <p>TEMP. MIN. 40°F - MAX 100°F (Long Term)<br/>TEMP. MIN. 50°F - MAX 90°F</p> |
| (j)   | V.O.C. 1.09 lbs per gallon (130 grams/liter)   | (k) WEIGHT OF DRY FILM: 3-12 grams sq.ft.                                     |
| <p><b>SPECIAL SAFETY PRECAUTIONS:</b></p> <p>PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: WARNING! IRRITANT. <b>Read MSDS before use.</b> 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.</p> <p>OTHER PRECAUTIONS: Avoid extreme heat - keep away from flame.</p> |  |   |
| IV.   | <p>SURFACE PREPARATION MINIMUM REQUIREMENTS (USE SPECIFIC STANDARD NUMBER(S)):</p>   |   |
| (a)   | INITIAL – Remove grease, oil, and dirt (SSPC-SP1) or other approved method followed by grit or shot blasting.  |   |
| (b)   | TOUCH-UP – Ensure the surface is free of dirt, oil, grease and other contaminants.   |   |
| (c)   | PROFILE: (INCLUDE METHOD USED) - NA  |   |
| (d)   | <p><b>SPECIAL INSTRUCTIONS</b> - For recoat time over curing non-skid or primer refer to the appropriate ASTM-F718.</p> <p><b>PRIMER REQUIREMENTS</b> – (IF APPLICABLE): Use MS-7CZ/MS-8CZ/MS-9CZ/MS-11CZ for substrates not to receive non-skid coatings.</p> |   |

- V. MIXING PROCEDURE: **NOTE: Incorrectly mixed material will not cure properly**
- (a) MIX RATIO BY WEIGHT - 7.04:1 – Two Component  
MIX RATIO BY VOLUME - 2.08:1
- (b) INDUCTION TIME – 15 minutes (See special instructions for additional information)
- (c) RECOMMENDED SOLVENT – THINNING – Not Authorized  
 CONFINED AREAS – N/A  
 NON-CONFINED AREAS – N/A  
 CLEAN-UP – 1) Water and Soap  
 2) Propylene Glycol Ethers
- (d) THINNING REQUIREMENTS (RATIO) – Not Applicable
- (e) POT LIFE – 1 Gallon Kit
- |         |   |             |
|---------|---|-------------|
| 2 - HRS | @ | 90°F (32°C) |
| 4 - HRS | @ | 70°F (21°C) |
| 5 - HRS | @ | 50°F (10°C) |
- (f) SPECIAL INSTRUCTIONS – Part A should be premixed to ensure a uniform appearance is achieved. Then add Part B to A and mix thoroughly for 2-3 minutes. **IMPORTANT: Once catalyzed all the material must be used within 4 hours @ 70°F. If the material is used after 4 hours it may not cure properly even though still liquid.**

- VI. APPLICATION: **NOTE: Cooler temperatures extend curing times, warmer temperature shortens curing times especially with waterbased LOW VOC coatings.**
- (a) ENVIRONMENTAL LIMITATIONS: Do not apply when surface temperature is under 40°F or above 140°F.
- AIR TEMP. MIN. - 40°F MAX. - 100°F  
 % RELATIVE HUMIDITY MIN. - 0% MAX. – 85%
- (b) AVERAGE FILM THICKNESS (SSPC PA2-73T) WET MIN. – 2.5 mils - WET MAX. – 10 mils  
 DRY MIN. – 1.25 mils - DRY MAX. – 5 mils  
**NOTE: Optimum wet film thickness for quickest dry times is 2.5 – 5 mils**
- (c) DRY TIMES (ASTM D1650) : **NOTE Times are for a 5 mil WFT. Thicker films may dry slower.**
- (d)
- |                        |       |   |             |   |          |
|------------------------|-------|---|-------------|---|----------|
| DRY TO TOUCH IN HOURS  |       |   |             |   |          |
| MIN.                   | 2-3   | @ | 90°F (32°C) | @ | 50% R.H. |
| MIN.                   | 4-5   | @ | 70°F (21°C) | @ | 50% R.H. |
| MIN.                   | 8-10  | @ | 50°F (10°C) | @ | 50% R.H. |
| DRY TO RECOAT IN HOURS |       |   |             |   |          |
| MIN.                   | 3-5   | @ | 90°F (32°C) | @ | 50% R.H. |
| MIN.                   | 6-8   | @ | 70°F (21°C) | @ | 50% R.H. |
| MIN.                   | 12-16 | @ | 50°F (10°C) | @ | 50% R.H. |
| FOR IMMERSION IN HOURS |       |   |             |   |          |
| MIN.                   | 48    | @ | 90°F (32°C) | @ | 50% R.H. |
| MIN.                   | 72    | @ | 70°F (21°C) | @ | 50% R.H. |
| MIN.                   | 96    | @ | 50°F (10°C) | @ | 50% R.H. |
- (e) **EQUIPMENT REQUIREMENTS** (INCLUDE PREFERRED, SUITABLE AND NOT SUITABLE REQUIREMENTS):  
 Adequate power or mechanical mixer. Suitable Nap Roller or Brush. Spray: Conventional, Air or Airless. For Airless applications, a Graco 30:1 or Bulldog 35:1 is recommended. Fluid hoses 50', <3/8" ID / 1/4 "ID Whip hose.
- SPECIAL INSTRUCTIONS:** 1) Do not apply when deck temperature is under 40°F or over 140°F. 2) At time of application, in accordance with MIL-PRF-24667B, MATERIAL TEMPERATURE should be no lower than 50°F or higher than 90°F. 3) Caution should be taken that the surface temperature is at least 5°F above the dew point at application.