SHIPBUILDERS AND MARINE – ASTM – F718

PAINTS AND COATINGS **MS-400G LSA**
PRODUCT / PROCEDURE DATA SHEET NO._____

Last Updated:	03-15-05

I. GENERIC TYPE AND DESCRIPTION: Epoxy - Non-Skid Deck Coating
Specification Number (If Applicable): MIL-PRF-24667-A/B, Type I, Composition G

II. MANUFACTURERS DATA:

(a) MANUFACTURER:
ITW American Safety Technologies

(b) PRODUCT DESIGNATION: **MS-400G LSA**

(c) COLOR(S): Standard Color Fed. Std. 595: Dark Gray 36076

(d) USES: Low Solar Absorbing 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 area due to abrasive aggregate

III. PROPERTIES:

(a) % VOL. SOLIDS (ASTM D2697): 86 ± 1%

(b) FLASH POINT (ASTM D93):>102°F (39C)
OR (ASTM D56): >102°F (39C)

(c) WT. PER GAL. (FTMS 141_a 4184.1): 18.7 ± .2 lbs.

(d) SHELF LIFE: 1 Year non-extendable per MIL-PRF-24667A/B

(e) VISCOSITY (FTMS 141_a 4281):40000-46000cps 75F(f) (Thixotropic)

(f) PACKAGING: 5 gals in 6½ gal. Pails

(g) NUMBER OF COMPONENTS: 2

(h) GLOSS (ASTM D523): N/A

(i) STORAGE REQUIREMENTS: TEMP. MIN. 40°F MAX. 100°F (Long Term)
24 hours prior to mixing TEMP. 50°F 90°F
(Colder temperatures will extend cure time)

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 (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 MIN. SSPC-10/NACE 2 MAX. SSPC-5/NACE 1
UHP Water Jetting NACE5/SSPC SP12/ WJ-2/NV-2

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 an approved primer.

(d) **SPECIAL INSTRUCTIONS** - Substrate Anchor Tooth Profile: A minimum of 2 mils anchor tooth profile is required for all areas designated to receive nonskid on both critical and non-critical decks. An anchor tooth profile depth of 3 – 4.5 mils is required for the application of nonskid coatings systems on Aircraft Carrier flight and hangar decks. Application of nonskid coatings systems on substrates which exhibit anchor tooth profile depths greater than 7 mils deep is not recommended.

PRIMER REQUIREMENTS (IF APPLICABLE): ITW American Safety Technologies MS-7C/MS-7CZ primer should be applied at 2-3 mils minimum DFT, above the averaged anchor tooth profile.

V. MIXING PROCEDURE: **NOTE: Incorrectly mixed material will not cure properly.**

(a) MIXING RATIO BY WEIGHT - 13.3: 1 (Base to hardener)
BY VOLUME - 5.7: 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) Aromatic Naphtha
3) N-Methyl Amyl Ketone (MAK)

(d) THINNING REQUIREMENTS (RATIO) - Not Applicable

(e) POT LIFE - 1 Hrs@ 90°F (32C)
2 Hrs@ 70°F (21C)
3 Hrs@ 50°F (10C)

(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 or until the mixed material assume 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 temperatures shorten curing times.**

(a) ENVIRONMENTAL LIMITATIONS: Do not apply when surface temperature is under 40°F or over 120°F.
AIR TEMP. MIN. 40°F MAX. 100°F
% RELATIVE HUMIDITY MIN. 0% MAX. 85%F

(b) AVERAGE FILM THICKNESS (SSPC PA2-73T) WET MIN. 53 mils WET MAX. 82 mils
DRY MIN. 45 mils DRY MAX. 70 mils
Note: Spread rate per gallon is subject to variation due to environmental conditions and applicator technique.

(c) DRY TIMES (ASTM D1650) - RECOAT
MIN. 48 Hrs @ 90°F (32C) @ 50 % R.H.
MIN. 96 Hrs @ 70°F (21C) @ 50 % R.H.
MIN. 180 Hrs @ 50°F(10C) @ 50 % R.H.

MAX. Hrs @ °F (°C)

TO HANDLE
MIN. 12 Hrs @ 90°F (32C) @ 50 % R.H.
MIN. 24 Hrs @ 70°F (21C) @ 50 % R.H.
MIN. 48 Hrs @ 50°F (10C) @ 50 % R.H.

FOR IMMERSION
MIN. 72 Hrs @ 90°F (32C)
MIN. 96 Hrs @ 70°F (21C)
MIN. 180 Hrs @ 50°F (10C)

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: 1) Do not apply when surface temperature is under 40°F or over 120°F. 2) At time of application, in accordance with MIL-PRF-24667A/B, 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.
NOTE: MS-400G LSA is formulated to be applied within the parameters listed on this document. MIL-PRF-24667A/B QPL applications may adjust the environmental and application procedures recommended by this ASTM-F718.