



### **TECHNICAL DATA SHEET - MS-11CZ**

Revised:10/2019

### **PRODUCT DESCRIPTION**

**MS-11CZ** Surface Primer is a low temperature curing, heavy duty, anti-corrosive modified epoxy primer which forms a tough abrasion resistant film that protects the substrate from salt and chemical attack. Additionally, MS-11CZ is a HAPS free primer which contains specially formulated zinc complexes which provide "State of the Art" cathodic protection against corrosion of steel decks on Navy vessels. This unique ability allows MS-11CZ to meet the extreme demands of a system in marine environments.

**MS-11CZ** provides excellent protection of surfaces against aggressive and corrosive environments. MS-11CZ Surface Primer is designed to be used in conjunction with American Safety Technologies high performance non-slip decking products and meets the low volatile organic compound requirements of California and NAVSEA air pollution guidelines.

#### SURFACE PREPARATION METAL

- MS-11CZ can be applied to any clean, dry surface. All rust, mill scale, paint, dirt, grease, oil, etc. must be completely removed. Recommended methods of cleaning steel surfaces are as follows:
  - a. Grit-blasting to SA 2.5 (near white metal) or SSPC-SP10, is the preferred method of cleaning and results in the best surface for adhesion.
  - b. Where grit-blasting is not feasible, power tool cleaning utilizing power sanders fitted with #16 grit aluminum oxide sanding discs can produce a sufficiently clean surface provided cleaning is carefully and intensively done.

- b. Remove oil, dirt, wax, etc., by dissolving in a water- based cleaner/degreaser such as LPS Precision Clean available from American Safety Technologies. An alternative method is to remove the grease or oil with a solvent. Solvents are flammable and must be handled with care. It is important that the solvent not be allowed to evaporate during the cleaning process and redeposit grease or oil on the deck. Ample solvent must be applied to the surface to completely dissolve the grease and oil and the solvent containing the dissolved grease and oil must be wiped up with clean rags before the solvent dries.
- 2. After cleaning, all loose particles must be removed by brushing, air hosing or similar method.

#### HIGH AND ULTRA HIGH-PRESSURE WATER JETTING

# ALL SURFACES TO BE RECOATED SHALL BE CLEANED IN ACCORDANCE WITH NACE/SSPC WJ-2/SC-2.

WJ-2: A WJ-2 surface shall be cleaned to a matte finish with at least 95% of the surface area free of all previously existing visible residues and the remaining 5% containing only randomly dispersed stains of rust, coatings and foreign matter.

SC-2: An SC-2 surface shall have less than 7 mg/cm<sup>2</sup> chloride contaminants, less than 10 mg/cm<sup>2</sup> of soluble ferrous ion levels, and less than 17 mg/cm<sup>2</sup> of sulfate contaminates as verified by field or laboratory analysis using reliable, reproducible test equipment.

## **MS-11CZ** LOW TEMPERATURE CURE TYPE VIII ANTI CORROSIVE, LOW V.O.C. STEEL PRIMER MIL-PRF-24667C

**ITW Polymers Sealants** North America

### APPLICATION

- Application should only take place when surface and ambient temperature is above 35°F (1.6°C) and the material temperature is above 50°F (10°C). Application when surface temperature is above 90°F or below 35°F is not recommended. Surface to be painted must be at least 5°F (3°C) above the dew point.
- 2. **MS-11CZ** should be applied to a minimum 2-3 mils (50-75 microns) dry film thickness above the measured surface profile.
- MS-11CZ can be applied by spray, roller or brush. Spraying should be done perpendicular to the surface to insure complete coverage. Each pass of the spray gun should overlap the previous pass by 50%. Weld seam and edges should be stripe coated prior to complete prime coat.
- 4. MS-11CZ is a two-part compound. Mechanically mix the base portion until homogenous. Pour the hardener into the container of base material and mechanically stir thoroughly until uniform (approximately three minutes). NO THINNERS MAY BE ADDED. Make sure that all sediment is stirred up off the bottom of the can.
- MS-11CZ does not require the usual induction period and may be applied immediately after mixing. Working pot life is 20 minutes at 70°F.
- 6. The primed surface should be protected from contamination. Block off area to prevent any foot or rolling traffic.
- 7. If the non-skid application is delayed so that the surface becomes contaminated, clean the area again. Tack coat is not normally required provided the non-skid application is made within 7 days at 50°F (10°C). After 7 days, the primed surface must be mechanically abraded or brush blasted prior to application of a tack coat of **MS-11CZ** primer.
- 8. Clean tools and spray equipment immediately after completing installation using an epoxy solvent compliant with state and federal V.O.C. regulation.

### **PRODUCT SPECIFICATIONS**

V.O.C.	0.76 lbs per gallon (91.42 grams/liter)
SOLIDS BY WEIGHT	90-96%
POT LIFE IN 3 GAL KIT	20 min in 70°F @ 50% RH (Constant)
GEL TIME IN 3 GAL KIT	60 min in 70°F @ 50% RH (Constant)
DRY TO TOUCH	$\leq$ 24 hrs in 35°F @ 50% RH (Constant) $\leq$ 12 hrs in 50°F @ 50% RH (Constant)
FULL CURE TIME	$\leq$ 7 days in 35°F @ 50% RH (Constant) $\leq$ 24 hrs in 70°F @ 50% RH (Constant)
ESTIMATED COVERAGE	180-250 sq.ft./gal. 3 - 10 Mils WFT 2 - 9.5 Mils DFT
WEIGHT PER GALLON	11.92 lbs/gal (Mix)
FLASH POINT	> 102°F
PACKAGING	1 Gallon Kits 3 Gallon Kits
STANDARD COLOR	Dark Gray, Buff, Haze Gray

**CAUTION:** Read Safety Data Sheet before using this material. Use only with adequate cross ventilation. Keep away from extreme heat, sparks and open flame. Keep from freezing. Avoid prolonged breathing of vapors. For dizziness, seek fresh air. Avoid contact with skin. Use gloves, goggles and coveralls. In case of spillage on clothing, change clothing to prevent prolonged contact with skin. Wash contaminated clothing before reuse. In case of accidental contact with skin, wash immediately with soap and water. In case of eye contact, flush thoroughly with plenty of water and call physician. If swallowed accidentally, do not induce vomiting. Seek medical attention immediately. The user of this product is responsible for making its own evaluation and tests regarding the capabilities, safety, utility, suitability and application of the product, and assumes all risks and liabilities resulting from the use or application of the product, whether used alone or with other products. ITW Polymers Sealants North America, Inc. (herein referenced to as the COMPANY) warrants only that the product conforms to the specifications contained in product Technical Data Sheets published By the COMPANY, a copy of which is available to the user. If the product fails to conform to this warranty, the user shall return the product within 10 days of the purchase date with a note specifying the defect and the COMPANY will either replace the product or at its option, return the purchase price. EXCEPT AS EXPRESSLY PROVIDED IN THIS PARAGRAPH, THE COMPANY MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, NATURE OR DESCRIPTION, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, AND HEREBY DISCLAIMS THE SAME. In no event shall the COMPANY be liable to the user of this product, whether in contract or in tort or any other legal theory (including, without limitation, negligence), for damages which exceed the purchase price of the product, or for any indirect, incidental, conseque