

TECHNICAL DATA SHEET

MS-2000

NON-SLIP DECK COATING

MIL-PRF-24667B Type IV

Description

MS-2000 is a two-part, non-slip deck coating formulated from a combination of epoxy resins to provide optimum toughness and corrosion resistance. **MS-2000** was developed for applications on aircraft carrier flight decks to provide non-slip protection for aircraft and personnel and at the same time provide the greatest possible resistance to wear.

MS-2000 is fire retardant in the cured state and is resistant to fire and jet blast, most acids, alkalis, solvents, grease, oil, salt water, detergents, alcohol, gasoline, jet fuels and hydraulic fluids. Because of its tenacious bond, rust will not creep under the coating if fractured.

MS-2000 can be used on all classes of Navy ships.

In accordance with NAVSEA guidance to non-skid systems, **MS-2000** is to be used with the following American Safety Technologies MIL-SPEC and NAVSEA approved products: MS-7C, MS-7CZ, or MS-10C Primer and MS-200 Color Topping.

Surface Preparation

MS-2000 can be applied to any clean, dry metal surface. All rust, mill scale, paint, dirt, grease, oil, etc. must be completely removed. Recommended methods of cleaning steel surfaces are as follows:

- Grit blasting to SA 2.5 (near white metal) or SSPC-SP10 is the preferred method of cleaning and results in better surface for adhesion.
- 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.
- If there is oil or grease on the surface, it must be removed prior to cleaning. The preferred method is to scrub with a strong detergent and flush area thoroughly while still wet. An alternative method is to remove the grease or oil with a solvent such as xylene. 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 re-deposit grease or oil on deck.

It is recommended that MS-7C, MS-7CZ, or MS-10C Primer be applied on metal surfaces immediately after the surface has been cleaned and before rust or oxidation has had a chance to form or surface becomes dirty or contaminated in any way.

Supersedes – MIL-D-24483 Type I

Additional Information Available: WWW.ITWAST.COM

Specifications

V.O.C.

- 1.8 lbs. per gal.
(220 grams/liter)

Volume Solids (%)

- 75%

Pot Life

- 4 hours @ 70°F (21°C)

Hard Dry

- 24 hours @70°F (21°C)

Cure Time

- 4 days @70°F (21°C)

Estimated Coverage

- 60 sq. ft. per gal. - spray

Weight per Gallon

- 16.6 lbs. per gal.
(1.99 kg./liter)

Flash Point

- 102°F (39°C)-CC

Coefficient of Friction IAW MIL-SPEC

- Dry -1.15
- Wet -1.00

Packaging

- 5 gallon kits

Standard Color

- Dark Gray (36076)

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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 residue 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/cm² chloride contaminants, less than 10 mg/cm² of soluble ferrous ion levels, and less than 17 mg/cm² of sulfate contaminants as verified by field or laboratory analysis using reliable, reproducible test equipment.

Application

MS-2000 is designed to be applied over primer.

1. **MS-2000** is a two-part coating consisting of a base material and a hardener.
2. Pre-mix base component. Make sure all settlement is lifted off the bottom of the container and is uniformly dispersed in the material.
3. Pour entire contents of hardener can into base material. Mix hardener and base material with a mechanical mixer for approximately 3-5 minutes or until mixed material assumes a uniform color and appearance. Apply material immediately. No induction time is required.
4. Working pot life is approximately 4 hours at 70°F. Pot life is increased at lower temperatures and decreased at higher temperatures.
5. **MS-2000** can be applied at ambient temperatures between 40°F and 90°F. At below 50°F surface temperature, curing time will increase substantially. Application when surface temperature is above 130°F or below 50°F is not recommended. Avoid application during periods of high humidity.
6. **MS-2000** can be applied by spray equipment.

Application Techniques

1. **MS-2000** should not be thinned. Thinning could result in grit not remaining properly in suspension.
2. Specialized mastic type spray equipment is required. A recommended set-up is as follows:
 - a. A 5-gallon bottom outlet pressure tank equipped with a double regulator and an air driven agitator, and 1" I.D. outlet pipe.
 - b. 25 feet of 3/8" air hose with 3/8" female connectors at each end.
 - c. 25 feet of 3/4" material hose with 3/4" female connectors at each end.
 - d. Binks Model 7E2 spray gun equipped with 1/4" (#45) internal air cap or a Binks Model 52-2012 (4 foot) pole gun equipped with the same fluid nozzle and air nozzle.
3. Minimum air supply required is 20 CFM at 90 lbs. pressure. Recommended pressure is 15-20 psi on material and 20-25 psi on atomization. Always keep atomization air pressure higher than pot pressure. Keep agitator running slowly. Good coverage and film thickness will be obtained working 18" or 24" distance from surface. Overlap strokes about

50%. Make sure of wet application. Very little abrasive rebound will be noticed at 15 psi; however, it will be more noticeable at higher pressures.

4. When temperature is at 80°F, it is advisable to flush the spray equipment with epoxy solvents every hour or so in order to prevent the possibility of any material setting up and plugging the equipment.

Surface Maintenance

To maintain the non-slip, safety performance of the coating, we recommend periodic cleaning with an approved cleaner/degreaser in accordance with current military directives. Scrub surface with a long handled, fiber bristled brush or floor machine. Rinse with clean water and dry.

Foreign matter such as chewing gum, should be removed with a scraper or putty knife and then cleaned following above procedure.

Made in U.S.A.

CAUTION

Read Material Safety Data Sheet before using this material.

Contains epoxy resins. Catalyst contains Amines. Use only with adequate cross ventilation. Keep away from extreme heat, sparks and open flame. Avoid prolonged breathing of vapors. For dizziness, seek fresh air. Toxic material. 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. Discard contaminated shoes. 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.

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