

## TECHNICAL DATA SHEET

# MS-400G LT

**HIGH SOLIDS FAST CURING  
NON-SLIP DECK COATING**

**Type I Comp G**

### Description

MS-400G LT is a fast curing, high solids, two part, anti-slip deck coating formulated with epoxy resins to give maximum wear and impact resistance. Ideal for commercial and military applications where fast turn-around time is desired. It is well suited for pedestrian and heavy vehicular traffic in the harshest of environments.

Fire retardant in the cured state, MS-400G LT is resistant to fire and jet blast, most acids, alkalies, solvents, grease, oil, salt water, detergents, alcohol, gasoline, jet fuels, cellulose and other hydraulic fluids. Because of its tenacious bond, rust will not creep under the coating if fractured on steel substrates. This coating is well suited for a variety of substrates including concrete, metals, and fiberglass.

### Recommended Uses

In accordance with NAVSEA guidance to non-skid systems, MS-400G LT is designed to be used in conjunction with the the following American Safety Technologies MIL-SPEC and NAVSEA approved products. MS-7C, MS-7CZ or MS-7CZLT primers and MS-200 or MS-180 Color Toppings.

### Surface Preparation

MS-400G LT 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 surface are as follows: Metal Decks:

#### GRIT BLASTING

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.

c. 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. 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.

Additional Information Available: [WWW.ITWAST.COM](http://WWW.ITWAST.COM)

## SPECIFICATIONS

### V.O.C.

- 0.9 lb/gal  
(114 grams/liter)

### Volume Solids (%)

- 86 %

### Pot Life

- 20 mins @ 90°F (32°C)
- 45 mins @ 70°F (21°C)
- 90 mins @ 50°F (10°C)
- 3 hours @ 35°F (1.6°C)

### Hard Dry

- 12 hours @ 70°F (21°C)
- 18 hours @ 50°F (10°C)
- 36 hours @ 35°F (1.6°C)

### Cure Time

- 4 days @ 70°F (21°C)

### Estimated Coverage

- 20-30 Sq. ft. per gal.  
Roller
- 18-22 Sq. ft. per gal.  
Notched Trowel

### Weight per Gallon

- 18.7 lbs. per gal.  
(2.3 kg./liter)

### Flash Point

- 102°F (39°C)-CC

### Coefficient of Friction IAW MIL SPEC 500 Cycles

- Dry - 0.99
- Wet - 0.94

### Packaging

- 5 Gallon kits

### Standard Color

- Dark Gray (36076)

## 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/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 contaminants as verified by field or laboratory analysis using reliable, reproducible test equipment.

It is recommended that MS-7CZ or MS-7CZ LT Primer be applied on steel 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.

### Application

MS-400G LT is designed to be applied over a primer.

#### IMPORTANT :

**Due to its rapid setting formula it is important to apply material promptly after mixing at temperatures above 50°F. Follow application method and directions carefully.**

1. MS-400G LT is a two-part coating consisting of a base material and a hardener.
2. Pre-mix base component. Makes 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. Material can be immediately applied since induction time is not required.
4. Working pot life is approximately 45 minutes at 70°F (21°C). Pot life is increased at lower temperatures and decreased at higher temperatures.
5. MS-400G LT can be applied at ambient temperatures between 35°F and 100°F. Material is not recommended for use below 35°F. At

low surface temperatures material will not cure and cure times will increase substantially. Application when surface temperature is above 110°F or below 35°F is not recommended.

### APPLICATION TECHNIQUES

#### ROLLER

1. Use a phenolic roller available from ITW American Safety Technologies. It is important that the rolled profile expose the maximum amount of non-slip aggregate. If aggregate is not properly exposed, the coating may become slippery when wet.
2. Pour a "ribbon" of MS-400G LT on the surface 2'-3' long and approximately 4"-6" wide. Roll material in one direction only, in straight strokes pulling material toward you with a moderate amount of pressure on roller handle. Do not over-roll too many times or press down too heavily. Be careful that material does not build up too thickly along welds (roll across welds, not along them). Material applied too thickly may not cure properly.
3. High temperatures will shorten drying time and conversely, lower temperatures and high relative humidity will lengthen drying time. Exterior applications must be protected from rain for 12-24 hours after application according to humidity. Protect from heavy or extended

exposure to water, oil and chemicals for 5-7 days during final cure.

#### Notched Trowel

1. Use an approved NAVSEA notched trowel for military applications. Notches may be selected according to desired effect and texture intended.
2. Pour a "ribbon" of MS-400G LT on the surface 2'-3' long and approximately 4"-6" wide. Spread material by pushing trowel.
3. Using an even stroke, pull the non-skid toward the applicator at a 60° degree angle from the deck to the handle. Remove any excess skid build-up from the trowel prior to making a second pass by hitting rubber insert on deck. When pouring non-skid for continuation of ridge profile, pour non-skid on top of end trail to avoid gaps or low spots.
4. The supplier should obtain straight even strokes to give the area a uniform appearance.

### SURFACE MAINTENANCE

To maintain the non-slip, safety performance of MS-400G LT, we recommend periodic cleaning with an approved cleaner/degreaser in accordance with current military directives.

#### 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.

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. American Safety Technologies (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 under any other legal theory (including, without limitation, negligence), for damages which exceed the purchase price of the product, or for any indirect, incidental, consequential or similar damages, arising out of sale, use or application of the product, or for any claim made against the user by any other party, even if American Safety Technologies has been advised of the possibility of such claim.