

## TECHNICAL DATA SHEET

# MS-660G UV/LSA

UV RESISTANT NON-CHALKING EPOXY  
LOW SOLAR ABSORBING  
HI-SOLIDS NON-SLIP DECK COATING  
MIL-PRF-24667B Type I, II, III Comp G

## Description

**MS-660G** is an abrasive, heavy duty, non-slip deck coating formulated with special epoxy resins and Kevlar® aramid\* to give maximum adhesion on aircraft carrier flight decks to provide non-slip protection for aircraft, rolling equipment and personnel. The formula is a patent pending special resin system which out performs all other epoxy systems in weatherability. Laboratory QUV testing has shown performance of over 2000 hrs with minimal effect. MS-660G is approved for CV/CVN, LHD/ LHA flight decks.

Fire retardant in the cured state, **MS-660G** is resistant to fire and jet blast, most acids, alkalies, solvents, grease, oil, salt water, detergents, alcohol, gasoline, jet fuels, cellulube and other hydraulic fluids. Because of its tenacious bond, rust will not creep under the coating if fractured.

## Recommended Uses

**MS-660G** is designed to be used in conjunction with the following American Safety Technologies MIL-SPEC and NAVSEA approved products: MS-7C/MS-7CZ Metal Primers, MS-200/MS-180 Color Toppings or MS-1600 intermediate membrane.

## Surface Preparation

**MS-660G** 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 for 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 for MS-7C, or MS-7CZ primers.

b. Where grit-blasting is not feasible, power tool cleaning utilizing power sanders fitted with #16 or #30 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 an approved 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.

Refer to the **MS-660G ASTM-F718** for detailed environmental limitations, surface preparation, mixing, and application instructions. Documents are available at: [WWW.ITWAST.COM](http://WWW.ITWAST.COM)

## Specifications

### V.O.C.

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

### VOHAPS

- 0 grams/liter of solids

### Volume Solids (%)

- 78%

### 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

- 20-30 sq. ft. per gal. - roller
- 18-22 sq. ft. per gal. - notched trowel

### Weight per Gallon

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

### Flash Point

- 102°F (39°C)-CC

### Coefficient of Friction

- IAW MIL-SPEC 500 cycles
  - Dry - 1.22
  - Wet - 1.20

### Packaging

- 5 gallon kits

### Standard Color

- Dark Gray (36076)
- Special Colors Available

## HIGH AND ULTRA HIGH-PRESSURE WATER JETTING

ALL SURFACES TO BE RECOATED SHALL BE CLEANED IN ACCORDANCE WITH NACE/SSPC 12 WJ-2/NV-2.

WJ-2: surface shall be cleaned to a matte (dull, mottled) finish which, when viewed without magnification, is free of all visible oil, grease, dirt, and rust except for randomly dispersed stains of rust, tightly adherent thin coatings, and other tightly adherent foreign matter. The staining or tightly adherent matter is limited to 5% of the surface.

NV-2: An NV-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-7C or MS-7CZ primer be applied on 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.

### Mixing

**MS-660G** is designed to be applied over a primer.

1. **MS-660G** is 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. Add entire contents of hardener bag 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 4 hours at 70°F (21°C). Pot life is increased at lower temperatures and decreased at higher temperatures.
5. **MS-660G** can be applied at ambient temperatures between 40°F and 100°F. At below 50°F surface temperature, curing time will increase substantially. Application when surface temperature is above 120°F or below 40°F is not recommended. Avoid application during periods of high humidity.

### Application Techniques

#### Roller

1. Use a phenolic roller available from 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-660G** 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-660G** 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.

Patent No. 5,686,507 and other Patents pending.  
Made in U.S.A.

\*DuPont registered trademark for its aramid fiber.

### 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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