

## TECHNICAL DATA SHEET

# MS-1600

## FLEXIBLE EPOXY INTERMEDIATE MEMBRANE

MIL-PRF-24667B Type III  
MIL-D-24613 Type II Class I&2

contains  
KEVLAR® aramid\*

### Description

**MS-1600** is a two-component flexible epoxy membrane coating designed to fill and level wood, metal or fiberglass decks prior to the application of MS-880G, Type III Comp G flexible Non-Slip, T-15 Broadcast Quartz or COLORFLAKE. Fire retardant in the cured state, **MS-1600** provides maximum adhesion, flexibility and wear resistance.

### Recommended Uses

Leveling and protecting uneven surfaces. Protects substrates from moisture intrusion while remaining flexible. Provide a base for the MS-880G. Also suitable as a membrane or flexible base coat for COLORFLAKE system according to MIL-D-24613 Type II Class 2 and T-15 Broadcast Quartz flooring Type II Class 1.

### Surface Preparation

Existing deck covering must be 100% removed. Surfaces to which **MS-1600** are to be applied must be thoroughly cleaned of all foreign matter such as dirt, oil, grease, paint or rust scale before installation is begun.

#### Metal Decks:

Surface should be cleaned by grinding, blasting (NACE No. 2, SSPC-10 or Sa 2 1/2 -near white metal) or using a needle gun to expose a rough, clean, bright metal. Remove all loose particles by brushing, vacuuming, air hosing or similar method. Immediately after surface has been cleaned, apply one coat of an approved epoxy primer such as American Safety Technologies MS-7C or MS-10C Primer, not to exceed 2.0 mils over the measured surface profile. Application of primer may be by short nap roller, brush or spray. Allow primer 7 hours drying time at 70°F before topcoating.

#### Wood Decks:

Remove any weathered or damaged wood to expose clean, solid deck. Smooth wood should be sanded to ensure proper mechanical bonding of **MS-1600**.

Immediately after surface has been cleaned, apply one coat of BC-80. Bonding Coat at a spread rate of approximately 200 square feet/gallon, (6 mils WFT). Application of BC-80 may be by short nap roller, brush, or spray. Allow BC-80 4 hours drying time at 70°F before applying **MS-1600** over the tacky surface.

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

### Specifications

#### V.O.C.

- 0.3 lbs. per gal.  
(39 grams/liter)

#### Volume Solids (%)

- 97%

#### Pot Life

- 1 hour @ 70°F (21°C)

#### Hard Dry

- 7 hours @ 70°F (21°C)

#### Hardness, Shore D

- 50-60 @70°F (21°C)

#### Estimated Coverage

- 62.5 sq. ft. per 5 gal. kit  
(1/8" thickness - 125 mils)
- 125 sq. ft. per 5 gal. kit  
(1/16" thickness - 63 mils)

#### Weight per Gallon

- 12.3 lbs. per gal.  
(1.4 kg./liter)

#### Packaging

- 5 gallon kits

#### Standard Color

- Dark Gray

## Fiberglass Decks:

Roughen and clean fiberglass with coarse grit #30 Aluminum Oxide discs or a grinder. Blow dust from surface and wipe clean with alcohol. Prime with MS-7C or MS-10C Epoxy-Polyamide primers at 6-8 mils WFT., allow 8-12 hours cure before top coating.

**MS-1600** is available in an LV ( low viscosity) version which may be used for areas which require self leveling. The MS-1600LV is ideal for leveling interior decks.

Supercedes MIL-D-23003, DOD-C-24667

## Application

**MS-1600** is designed to be applied over a primer (MS-7C, MS-10C and BC-80).

1. **MS-1600** 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 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 1 hour at 70°F (21°C). Pot life is increased at lower temperatures and decreased at higher temperatures.
5. The applicator should obtain straight, even strokes to give the area a uniform appearance.

6. **MS-1600** can be applied at ambient temperatures between 50°F and 90°F. Curing time will increase substantially below 50°F surface temperature. Application when surface temperature is above 120°F or below 50°F is not recommended. Avoid application during periods of high humidity.

7. **MS-1600** can be applied by roller or notched trowel.

## Application Techniques

### Roller:

1. Use a 3/16" inch nap roller available from American Safety Technologies Inc.
2. Pour a "ribbon" of **MS-1600** on the surface 2' to 4' long and approximately 1' to 2' wide. Roll material in slow straight strokes pulling material toward you with a moderate amount of pressure on roller handle and spread evenly.
3. Higher temperatures will shorten drying time and conversely, lower temperatures and high relative

humidity will lengthen drying time. Exterior applications must be protected from rain at least 12 to 24 hours after application according to humidity. Protect from heavy or extended exposure to water, oil and chemicals prior to top coating.

### Notched Trowel:

1. Use a NAVSEA approved notched trowel.
2. Pour a "ribbon" of MS-1600 on the surface 2' to 4' long and approximately 1' to 2' wide. Spread material by pushing trowel forward.
3. Using an even stroke, pull the membrane toward the applicator at a 60° angle from the deck to the handle. Remove any excess membrane build-up from the squeegee prior to making second pass by hitting rubber insert on the deck.

## 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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