



TECHNICAL DATA SHEET – MS-1600

Revised: 05/2024

PRODUCT 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, or COLORFLAKE systems. Fire retardant in the cured state, **MS-1600** provides maximum adhesion, flexibility and wear resistance.

Flexible water proof membrane while leveling and protecting uneven surfaces, Provides a base for the MS-880G for MIL-PRF-24667C TYPE III, COMP. G, also suitable as a membrane or flexible base coat for COLORFLAKE system according to MIL-PRF-32584 TYPE IV, CLASS 1, COMP. E.

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 ½ - 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-7CZ Primer, not to exceed 2.0 mils over 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 top coating.

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 PolySpec 100EX at a spread rate of approximately 320 sq.ft./gallon, (2 mils DFT). Application of PolySpec 100EX may be by short nap roller, brush, or spray, Allow PolySpec 100EX 4 to 6 hours drying time at 77°F or until thumb print tacky before applying **MS-1600**.

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-7CZ Epoxy-Polyamide primer at 6-8 mils WFT. Allow 8-12 hours cure before top coating.

MIXING AND APPLICATION

MS-1600 is designed to be applied over a primer (MS-7CZ, MS-11CZ & PolySpec 100EX).

1. **MS-1600** is a two-part coating consisting of a base material and a hardener.
2. Pre-mix base component, making sure all settlement is lifted off the bottom of the container and is uniformly dispersed in the material.
3. Pour 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

MS-1600

FLEXIBLE EPOXY INTERMEDIATE MEMBRANE
MIL-PRF-32584 TYPE IV, CLASS 1, COMP E
MIL-PRF-24667C TYPE III, COMP G / ANSI 118.10-2014

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.
2. Pour a "ribbon" of **MS-1600** on the surface 2'-4' (0.61m-1.22m) long and approximately 1'-2' (.30m-.61m) wide. Roll material in slow straight strokes pulling material toward you with a moderate amount of pressure on roller handle and spread.
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 for 12-24 hours after application depending on temperature and humidity conditions encountered. Protect from heavy or extended exposure to water, oil and chemicals prior to top coat.

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-1600 on the surface 2'-4' (0.61m-1.22m) long and approximately 1'-2' (.30m-.61m) wide. Spread material by pushing trowel.
3. Using an even stroke, pull the non-skid toward the applicator at a 60° angle from the deck to the handle. Remove any excess membrane build-up from the trowel prior to making a second pass by hitting rubber insert on deck.
4. The applicator should obtain straight even strokes to give the area a uniform appearance.

PRODUCT SPECIFICATIONS

GENERIC DESCRIPTION	2 Component Flexible Epoxy Membrane
V.O.C	0.4 lbs per gallon (50 grams/ liter)
SOLIDS BY WEIGHT	97 %
WEIGHT PER GALLON	12.3 ± 0.2 lbs per gallon
ESTIMATE COVERAGE	62.5 sq. ft. per 5 gal. kit @ 1/8" thickness 125 sq. ft. per 5 gal. kit @ 1/16" thickness
STANDARD COLOR	Dark Blue, Navy Blue, Gray (840) & Beige
CUSTOM COLORS	Available subject to special requirements
SHELF LIFE	1 Year (MIL-PRF 24667), (MIL-PRF-32584) Requirement
FLASH POINT	≥ 141° F (61°C) mixed
PACKAGING	5 Gallon kit in a 6½ Gallon Pail
COMPLIANCE	ANSI A118.10-2014

Further product specifications adhere to manufacturers ASTM F718.

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. EXCLUSION OF WARRANTIES: INSTALL AS DIRECTED ON AMERICAN SAFETY TECHNOLOGIES PRODUCT DATA SHEET. USER DETERMINES SUITABILITY FOR INTENDED USE AND ASSUMES ALL RISK AND LIABILITY. THIS PRODUCT IS SOLD "AS IS". EXCEPT AS REQUIRED BY LAW, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF TERMS ARE NOT ACCEPTABLE, RETURN UNOPENED PRODUCT TO PLACE OF PURCHASE.