

Mainstay® DS-3

High Performance Epoxy Coating



FEATURES/BENEFITS

SOLVENT FREE - 0 VOC'S	NSF STANDARD 61 CERTIFIED
ABRASION RESISTANT	FOR POTABLE WATER SERVICE
HIGH BUILD IN ONE COAT	USDA APPROVED FOR FOOD CONTACT

PRODUCT DESCRIPTION

MAINSTAY® DS-3 is a 100% solids, chemically modified epoxy coating utilizing a unique, multi-component curing system which contributes to a number of superior properties: toughness, abrasion resistance, and improved chemical and temperature resistance. This sprayable system may be applied at thicknesses up to 10 mils or more in a single application, thereby reducing application costs. The absence of solvent reduces shrinkage, cracking and disbonding and eliminates the problems related to solvent entrapment. MAINSTAY DS-3 cures in 12 hours at 77° F and can be recoated within 6 hours at 77° F. This property enables field applications under a variety of weather conditions resulting in minimum downtime. MAINSTAY DS-3 exhibits superior elevated temperature resistance in both dry and wet (immersion) environments. MAINSTAY DS-3 is particularly well suited for use as a topcoat over other high build MADEWELL and MAINSTAY coatings used as body coats over MAINSTAY ML-72 Sprayable Microsilica Restoration Mortar in potable water tanks.

PRODUCT DATA

COMPOSITION:

100% solids, modified epoxy coating.

FINISH:

High Gloss

COLOR:

White, Off White, Medium Gray, Black, and Sky Blue.

THICKNESS:

5 to 10 mils in one or multiple coats. Consult a Madewell technical representative for specific recommendations.

COVERAGE:

Approximately 200 ft² per gallon at 8 mils. Allowances should be made for waste.

PACKAGING:

Normally stocked in 3 quart and 3.0 gallon two component kits.

SURFACE PREPARATION:

Concrete: Concrete surfaces should be primed with MADEWELL 927 Penetrating Epoxy Primer/Sealer. See descriptive brochure for surface preparation and application instructions.

Rough or deteriorated concrete should be smoothed and/or repaired using either MAINSTAY ML-72 Sprayable Microsilica Mortar or MADEWELL 1312P Thixotropic Epoxy Putty. Refer to the applicable descriptive brochure for surface preparation and application instructions.

Steel: Apply only to clean, sound surfaces. All metal surfaces should be degreased or otherwise decontaminated prior to abrasive blast cleaning. Surfaces should be abrasive blast cleaned to a near white (NACE No. 2 or SSPC SP10) condition with a 2 to 4 mil anchor pattern depth.

MAINSTAY DS-3 may be used to topcoat steel surfaces which have been previously painted. However, compatibility with, and adhesion of, existing coatings should be checked by application of a test patch. Existing coating must be clean and profiled to promote adequate adhesion.

PRIMING:

Not required for steel surfaces. Concrete surfaces should be primed with MADEWELL 927 Penetrating Epoxy Primer/Sealer. See descriptive brochure for surface preparation and application instructions. Apply MAINSTAY DS-3 to primed surfaces when the MADEWELL 927 Primer has cured dry to the touch (but as soon as possible thereafter to avoid contamination of the primed surfaces).

MIXING RATIO:

Mix components at a volume ratio of 2 parts A to 1 part B. Whenever possible, avoid mixing partial kits.

MIXING:

This is a two component system. All components (liquids A and B) should be between 70° F and 90° F prior to mixing. The entire contents of each component should be thoroughly mixed individually before combining separate components together. Pour premeasured quantities of both components into a clean container and blend thoroughly using a power agitator.

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or, such as a Jiffy® mixer and a high strength industrial drill, for 3 to 5 minutes. Do not mix more material than can be used within stated working times.

WORKING TIME:

Approximately 60 minutes at 77° F. The working time will be extended somewhat at lower temperatures and shortened at higher temperatures.

THINNING:

Thin up to 15% by volume with T1 thinner.

APPLICATION:

This product is to be applied by trained workmen using specialized equipment. Both components must be preheated to 70° F to 90° F prior to application. A 45:1 airless spray pump at an air input pressure of ~90 PSI, is used to feed material through up to 50' of 3/8" diameter hose to a standard airless spray gun with a 0.023" to 0.027" reversible tip. It is recommended that 60 mesh in line strainers/filters be used. Other equipment, such as whip hoses, heaters or plural component equipment may be employed. **MAINSTAY DS-3** can also be applied by brush or 1/4" nap phenolic-core roller. Contact a Madewell technical representative for specific equipment recommendations and sources.

MAINSTAY DS-3 can be applied to other MADEWELL and MAINSTAY coatings within the recoat windows of the respective coatings. When apply-

ing any coating to a substrate freshly coated with any amine-cure epoxy coating, it is necessary to determine if that coating has developed an amine blush. This blush may appear as a milky white residue on the surface of the cured coating, but will not affect the integrity of the film. Blush must be removed by solvent wipe before application of another coat or an inadequate intercoat adhesion problem will occur.

CURE TIME:

Foot traffic: 12 hours at 77° F.

Immersion service: 24 to 48 hours, depending on temperature 77 degrees to 50 degrees. This product will not cure properly below 50 degrees Fahrenheit.

CLEAN UP:

Acetone or another Ketone solvent should be used to clean equipment. Skin should be cleaned using warm soapy water or commercial hand cleaner.

STORAGE:

Store components in sealed containers in dry environment at moderate temperature conditions (40° F to 80° F).

SHELF LIFE:

1 year, subject to reinspection thereafter.

SAFETY:

MAINSTAY DS-3 contains epoxy resins that *MAY CAUSE EYE OR SKIN SENSITIZATION*. Adequate health and safety precautions should be observed

during all storage, handling, use and drying periods. For best results and safest usage, user is specifically directed to consult the current "Material Safety Data Sheet" for this product. When using this product in a confined space or closed area, consult the current OSHA or ANSI bulletins on safety requirements. Do not take internally. If swallowed, call a physician immediately. Keep away from open flame and keep containers tightly closed when not in use.

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