

Mainstay® DS-4

Ultra High Build Epoxy Coal Tar Coating



FEATURES/BENEFITS

PERMANENT FLEXIBILITY	SUPERIOR CHEMICAL RESISTANCE
ABRASION RESISTANT	HIGH MOISTURE CURE
VERY HIGH BUILD	IMPACT RESISTANT

PRODUCT DESCRIPTION

MAINSTAY® DS-4 is a 100% solids, chemically modified epoxy coal tar coating utilizing a unique, multi-component curing system which contributes to a number of superior properties: toughness, permanent flexibility, and improved chemical and temperature resistance. This sprayable system may be applied at thicknesses up to 125 mils or more in a single or multiple applications, thereby reducing application costs. The absence of solvent reduces shrinkage, cracking and disbonding and eliminates the problems related to solvent entrapment. **MAINSTAY DS-4** cures relatively fast at 40° F and under high moisture conditions – even under water. This property enables field applications under a variety of weather conditions resulting in minimum downtime. **MAINSTAY DS-4** exhibits superior ultraviolet and sunlight resistance after years of exposure. **MAINSTAY DS-4** is particularly well suited for use as a topcoat over **MAINSTAY ML-72** Microsilica Cement Mortar (see section on Application).

PRODUCT DATA

COMPOSITION:

100% solids, modified epoxy coal tar coating.

FINISH:

Gloss

COLOR:

Black.

THICKNESS:

50 to 125 mils in one or two coats. Consult a Madewell technical representative for specific recommendations.

COVERAGE:

Approximately 16 ft² per gallon at 100 mils. Allowances should be made for waste.

PACKAGING:

Normally stocked in 4.5 gallon two component kits. Larger and smaller kits are available on special order.

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-4 may be used to topcoat steel surfaces which have been previously painted. However, compatibility with existing coatings (and adhesion of existing coatings) should be checked by application of a test patch.

PRIMING:

Not required for steel surfaces. Concrete surfaces should be primed with **MADEWELL 927** Penetrating Epoxy Primer/Sealer. See descriptive bro-

chure for surface preparation and application instructions. Apply **MAINSTAY DS-4** 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 1 part A to 2 parts 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, such as a Jiffy® mixer and a high strength industrial drill, for 5 minutes. Do not mix more material than can be used within stated working times.

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WORKING TIME:

Approximately 45 minutes at 90° F. The working time will be extended somewhat at lower temperatures and shortened at higher temperatures.

THINNING:

Thinning is not recommended. Use **MADEWELL 457** Thinner for cleanup of application equipment (see descriptive brochure).

APPLICATION:

This product is to be applied by trained workmen using specialized equipment. Both components must be preheated to 100° F prior to application. A 56:1 airless spray pump with an air input pressure of ~90 PSI is used to feed material through up to 50' of 1/2" diameter hose to a standard airless spray gun with a 0.031" to 0.035" 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-4** can also be applied by brush or roller. Contact a Madewell technical representative for specific application equipment recommendations and sources.

MAINSTAY DS-4 can be applied to **MAINSTAY ML-72** within one to two hours after placing and finishing of the ML-72 mortar (when the ML-72 has just become firm to the touch). The unique, essentially simultaneous, application of these two products is the basis for the *Mainstay Restoration and*

Corrosion Barrier System. The application of these two products by this technique should only be performed by trained workmen who are employed by a contractor that has been licensed by Madewell Products Corporation to perform this type of work. Contact a Madewell representative for additional information regarding specific application instructions, applicator training and contractor licensing.

CURE TIME:

Foot traffic: 24 hours at 70° F.

Chemical service: 24 hours to 3 days, depending on the chemical service and temperature.

CLEAN UP:

MADEWELL 457 Thinner is recommended for equipment cleanup (see descriptive brochure). 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-4 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.

WARRANTY

All technical data, recommendations and services are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable and are intended for use by persons having skill and knowledge, at their discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by the Buyer whether as recommended herein or otherwise. Such recommendations, technical advice or services are not to be taken as a license to operate or intended to suggest infringement of any existing patent. **MADEWELL PRODUCTS CORPORATION MAKES NO GUARANTEE OR WARRANTIES EXCEPT AS OTHERWISE PROVIDED IN WRITING, AND DISCLAIMS ANY AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

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