

# DEFY ALL-PURPOSE HEAVY-DUTY

## PRODUCT DATA

### DEFY All-Purpose Heavy-Duty Water Repellent

MANUFACTURER: SaverSystems

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## DESCRIPTION

DEFY All-Purpose Heavy-Duty Water Repellent is a one component, V.O.C. compliant water repellent and "chloride screen", which contains an optimized blend of silane/siloxane. This water-based blend penetrates concrete and masonry up to 1/4 inch or more depending on surface porosity and moisture content at the time of application.

DEFY Heavy-Duty Water Repellent reacts with the minerals in concrete and masonry in the presence of ultraviolet light and atmospheric moisture. This reaction forms strong permanent bonds beneath the surface and creates a hydrophobic zone that prevents water molecules from penetrating, while allowing free migration of water vapors. The chemical bonds formed in this process allow DEFY Heavy-Duty Water Repellent to become an integral part of the substrate and provide long-term water repellent protection.

## USES

DEFY Heavy-Duty Water Repellent protects most vertical or horizontal exterior, above-grade surfaces including: Adobe, Architectural concrete, precast or cast-in-place, Clay Brick, Mortars, Natural Stone, Limestone, Granite, Sandstone, Terra Cotta, Exposed Aggregate Products, Portland Cement Stuccos, and Concrete Masonry Units. Product is breathable, nonfilm forming, and will not alter surface color or appearance. It is ideally suited for use on concrete where chloride ion protection is needed including: driveways, sidewalks, architectural concrete; precast or cast-in-place, mortars, exposed aggregate products, portland cement stuccos, and Concrete Masonry Units.

Natural substrate color and surface textures are unaffected, with little or no gloss created. Slight darkening may occur on some adobe, limestone, or very dense surfaces. Testing is recommended before treating any surface to ensure desired results.

## BENEFITS

- 7 Year Warranty
- Protection from De-icing Salts and Chloride Ions
- Non-Glossy
- 100% Vapor Permeable
- Stain Protection
- Mildew/Fungus Resistant
- Freeze-Thaw Protection

## DIRECTIONS FOR USE

Surface and air temperatures should be a minimum of 40°F. Do not use on asphalt-based material and surfaces. Do not apply to frozen or frost covered surfaces. Application must be to clean, sound, dry to slightly damp surfaces. Do not apply to wet or water saturated surfaces, or when rainfall is expected within six hours.

**Surface Preparation:** Remove dust, dirt, grease, oils, efflorescence, wax, curing compounds, coatings or other foreign matter that might block or interfere with product penetration. Cure new masonry a minimum of twenty eight days, and at least three days after repairs or tuckpointing before applying product. Test a small area of surface before starting

general application to assure desired results and coverage rates. Provide adequate ventilation if applied indoors. **Note:** Product will cause any stains on surface being treated to darken. Remove all stains before applying.

## APPLICATION

**Vertical:** Apply from bottom up using a low pressure sprayer (10-25 psi) with a fan type nozzle. Flood surface until excess runs down six to eight inches below spray pattern. To assure optimum performance, a wet on wet application is recommended; apply second coat within three to five minutes. A wet treated surface may be agitated with a soft bristle brush to ensure even distribution and greater penetration. Protect adjacent paint films, windows, plant life, asphalt-based material and all non-targeted surfaces from overspray. Remove overspray immediately with soap and water.

**Horizontal:** Apply a single application with low pressure spray, or pour from container so that surface remains wet for two to three minutes before final absorption. Avoid puddling or ponding; brush or broom to spread material until it thoroughly penetrates the surface. Block all drains and use absorptive coverings to contain run-off of excess material. Use soap and water to remove overspray as soon as possible. **Note:** Over application of material may cause darkening of surface.

**Drying Time:** One to two hours depending on temperature and humidity.

**Clean-Up:** Thoroughly rinse spray equipment with clean water. Clean rollers with soap and water. Rinse thoroughly.

## CAUTIONS

Accumulation of product on ladders, scaffolding, decks, etc., may result in a slippery surface. Avoid contact with eyes and mucous membranes and prolonged contact with skin. Keep from freezing.

**First Aid:** In case of eye contact, flush with water for 15 minutes and get prompt medical attention. If swallowed, give milk or water. Do not induce vomiting. Call a physician immediately. For skin contact, wash thoroughly with soap and water. If irritation persists, get medical attention.

## LIMITED WARRANTY

Our recommendations for use of this product are based upon tests believed to be reliable. Since field conditions vary widely, the user must determine the suitability of the product for the particular use and specific method(s) of application. SaverSystems warrants that DEFY All-Purpose Heavy-Duty Water Repellent will exhibit a water repellent effect for seven years from the date of application if applied according to label instructions and if minimum application requirements are met. This warranty does not cover pre-existent flaking, spalling, abrading, faulty construction and/or other defects which might erode treated surfaces. If water repellent fails to perform as specified, SaverSystems will furnish, as the sole remedy, enough water repellent to correct the condition.

This warranty does not include labor, or the cost of labor for the re-application of water repellent. SaverSystems shall not be liable for incidental or consequential damages resulting from any breach of this warranty and fitness for use. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

## PACKAGING

Available in 1, 5, 30, and 55 gallon recyclable containers.

## TRANSPORT AND STORAGE

DEFY Heavy-Duty Water Repellent is not considered hazardous under Department of Transportation (DOT) regulations. Do not stack pallets. Keep from freezing.

## MAINTENANCE

Remove all contaminants which might stain or abrade treated surfaces as quickly as possible to minimize staining or abrasion. Occasional cleaning with mild detergent and water will generally restore treated surfaces to original appearance.

## PHYSICAL PROPERTIES

COLOR	..... Milky white
COMPOSITION	..... Water-based (modified siloxane)
SOLIDS BY WEIGHT	..... (8% +5)
SPECIFIC GRAVITY, AT 25° C	..... (.9892)
WT./GAL	..... Approx. (8.25 #/gallon)
FLASH POINT	..... None
PENETRATION	..... 1/16" - 1/4" (approx—depending on substrate)
VOC CONTENT (EPA METHOD 24)	..... (111 gr./lt.)
SHELF LIFE	..... 18 months in original sealed container
YELLOWING	..... None
SURFACE APPEARANCE AFTER APPLICATION	..... Unchanged to slight darkening

## TECHNICAL DATA

SS-W-110C	..... (.92%) Water absorption reduction
NCHRP 244 SERIES II	..... (90%)
ASTM G 53-88 (3000 hrs.)	..... No loss in water repellency
OHD-L-35	..... (.100%) (Water vapor permeable)
ASTM C 67-91	..... None treated specimen
ASTM G 53-88 (3000 hrs.)	..... No loss in water repellency

## COVERAGE RATES (Sq. Ft.)

Brick	..... 90 - 150
Concrete Block/Brick	..... 70 - 150
Concrete precast or cast in place)	..... 150 - 300
Stucco	..... 80 - 150
Adobe	..... 90 - 110
Limestone	..... 80 - 120
Most other cementitious products	..... 100 - 150