

# **Technical Data Sheet (TDS)**

# **PS100 Fluorinated Water, Oil & Salt Repellent WB Penetrating Sealer**

Low VOC, Water Based Repellent & Stain Inhibitor for Dense Concrete & Porous Natural Stone

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## **Product Description**

PS100 is a high performance specially formulated proprietary, water based, fluorinated protective surface treatment. It combines both hydrophobic and oleophobic characteristics to offer "Best in Class" performance for a penetrating sealer. Level of protection is typically only surpassed through use of topical sealers/ coatings. Use when maximum protection is needed but topical sealers/ coatings are not desired. PS100 penetrates into the micro pores and capillaries of unsealed dense surfaces and physically and chemically bonds to substrates to offer durable and long lasting protection. Using state of the art nanotechnology, maximum penetration is achieved due to its small molecular structure and very low surface tension. PS100 is based on short chain fluorochemistry which meets the goal of the US EPA PFOA Stewardship Program. It provides superior water, oil, and salt repellency. It also offers excellent "hold out" and stain resistance for oil and grease, dirt buildup, most food stains, and other common contaminants. In addition, PS100 combats freeze/ thaw damage, scaling and spalling, deicing chemicals, efflorescence, and mold/ mildew. Makes easier to clean and maintain and keeps surfaces looking cleaner for longer. It is VOC compliant, breathable, nonflammable, low odor, and UV resistant. It is non film forming, will not peel or delaminate, and maintains the traction coefficient of a surface. The PS100 is a "natural look" penetrating sealer that does not normally change the appearance of a surface. For best results, use on interior surfaces such as hand troweled, machine troweled, burnished, polished concrete, or other smooth, dense but yet porous concrete and porous natural stone that are subject to accidental spills.

#### **Recommended Uses**

PS100 was originally developed for commercial and industrial applications and is widely used throughout North America to this day for those applications. Concrete Sealers USA is now also making this professional grade sealer available to the residential market so small contractors, applicators, and do-it-yourselfers can enjoy the same superior benefits that architects, engineers, and large contractors have enjoyed for years. PS100 is recommended as a water, oil, and salt repellent and stain inhibitor for sealing existing dense concrete and porous natural stone. It is ideal for dense interior hand troweled, machine troweled, burnished, or polished concrete. It may also be used on cement terrazzo, grout, and mortar. It is recommended for sealing commercial and residential structures such as parking decks and structures, warehouse floors, distribution centers, factory floors, sporting arenas, convention centers, food preparation areas, automotive garage floors, workshop floors, residential garage floors, storage building floors, pole barn and shed floors, etc. It is suitable for horizontal or vertical and interior or exterior applications. Not intended for below grade waterproofing.

#### **Product Characteristics**

# **SDS Information / Physical and Chemical Properties**

**Boiling Point:**  $> 212^{\circ}$  F **pH:** 8.8 to 9.5 **Vapor Pressure:** N/A **Flashpoint:**  $> 212^{\circ}$  F

Solubility in Water: Yes Flammable Limits: Lower Limit: N/A; Upper Limit: N/A

**Evaporation Rate:** Similar to water **Finish:** Flat/Clear

Appearance and Odor: Clear or Yellowish w/ Low Odor Drying Time\*\*: Dry to touch 1-3 hours; traffic 6-12 hours

Specific Gravity: (H<sub>2</sub>0-1): 1.01 to 1.03 @ 24°C Shelf Life\*\*\*: 2 years unopened

% Volatile by Volume: < 40 g/L

**Coverage Rates\*:** 300-450 sq. ft./gal. for machine troweled concrete, mortar, and grout.

600-1000 sq. ft./gal. for burnished concrete, polished concrete, cement terrazzo, and natural stone.

<sup>\*</sup>Coverage rates are approximate and for estimating purposes only. Application rate based upon porosity and absorption. Always test absorption prior to application.

<sup>\*\*</sup>Drying times are for estimating purposes only. Actual drying time is based upon temperature, humidity, air flow.

<sup>\*\*\*</sup>Store container upright indoors in a cool, dry place and maintain temperature of 55°F to 85°F.

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## **Performance Characteristics**

Meets Goals of US EPA PFOA Stewardship Program.

Adheres to all Federal EPA, OTC, CARB, LADCO, SCAQMD VOC Standards for VOC.

Acceptable for use on floors and surfaces subject to USDA and FDA inspections and regulations.

#### Color

PS100 has a clear to yellowish appearance. Upon proper application, the substrate will have little, or no, noticeable change in appearance when dry.

# **Ordering & Shipping Information**

Packaging: 1 gal. Jugs

5 gal. Pails 55 gal. Drums

Shipping: Normal package delivery and trucking

# **Surface Preparation**

Substrates to be sealed must be a minimum of 28 days old and/ or be fully cured. The surface must be porous enough to allow penetration into the substrate. Surfaces should be clean and free of surface laitance, dust, dirt, debris, mildew, oil, grease, previous sealers, curing agents, paint or other surface coatings, and other contaminants. If acid or other cleaning compound is used for cleaning or etching the surface, neutralize the surface completely before application of PS100.

# **Application**

Always test porosity prior to application, especially on very dense concrete, stone, and masonry surfaces. Surface should be dry for proper penetration of the sealer. Should not apply to damp or wet surfaces or if rain is expected within 24 hours after application. Product is a one part system and requires no special mixing. Stir or gently agitate material thoroughly for 3-5 minutes before application. Do not apply below 40°F or above 95°F during the application or drying period. Apply uniformly with a low pressure pump-up sprayer. **Note: Do not atomize during application. Can cause serious lung damage or impairment if inhaled as an aerosol or fine mist. Ensure adequate ventilation during application and drying.** When applying material, work in small, manageable areas at a time in order to maintain a wet edge. Product should be applied to the point of rejection and be fully absorbed within 10-15 minutes without puddles. Use a broom, brush, roller, lambswool applicator, or microfiber pad to evenly distribute product as well as disperse any puddles as excessive application may result in white haze or film (especially on darker or colored surfaces) which will not affect sealer performance and generally dissipates over time or can be removed through light brooming or mopping.

Typically, one application to the point of rejection is required. Surfaces that are more porous, may be subject to ongoing accidental spills, or where maximum protection is desired, may benefit from additional applications. Apply next application after previous application is fully absorbed into the surface and is dry to touch. Only apply additional applications if product can be absorbed into the surface. Clean application materials with warm water. Protect surfaces from foot traffic for 6-12 hours after final application and from vehicle traffic and direct water contact for 24 hours. Maximum water and oil repellency is achieved after 72 hours. Reapply product as needed to maintain performance. Does not need to be stripped or removed for reapplication. Do not burnish, buff, or perform regular maintenance with aggressive diamond polishing pads. Maintain surfaces using microfiber pad, dry dust mop, or by autoscrubbing with nonabrasive nylon pad. Do not use harsh acidic or highly alkaline cleaners. Use of a neutral pH cleaner is recommended.

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## **Limitations**

PS100 is designed to work only on porous concrete and natural stone surfaces and is not intended for clay brick/ tile or asphalt. Product is also not intended for overly porous surfaces like concrete block. This product may damage vegetation or may etch glass, vinyl, aluminum, plastic, and metal. Avoid contact with eyes and skin. Note: Do not atomize during application. Can cause serious lung damage or impairment if inhaled as an aerosol or fine mist. Ensure adequate ventilation during application and drying. Sealer may be damaged if frozen prior to use. Not intended to seal cracks. Will not remediate structurally unsound surfaces with defects. The PS100 will not prevent surface etching from certain food items, acids, or other caustic chemicals. The product offers exceptional stain resistance and will eliminate or significantly reduce most common staining. Provides reasonable opportunity to clean up most accidental spills. All contaminants should be cleaned up as soon as possible. Extended exposure can lead to possible staining, absorption, or surface etching. In some cases, the product will act as sacrificial protection and will require reapplication. Company does not warranty specific performance results or compatibility with products manufactured by others. The Company shall bear no liability, other than replacement of defective product. A small test must be conducted prior to application. Based upon this test, the purchaser shall determine for themselves the suitability of this product for the intended use.

# **Environmental & Regulatory**

PS100 complies with EPA, FDA and OSHA strict requirements and contains only 40 g/L Volatile Organic Compounds (VOC). This product is considered a non-hazardous chemical under OSHA Hazard Communication Standard (29CFR 1910.1200). Contact may cause skin or eye irritation. Using with adequate air ventilation, eye protection, and gloves is recommended.

#### **Safety & First Aid Precautions**

Eyes: Flush with water for at least 15 minutes.

Skin: Wash thoroughly with soap and water.

Inhalation: Move subject to fresh air.

Digestion: Consult physician immediately.