

# Thetaguard™ HS-3035

Short-Chain hard-surface protectant

#### **Overview**

- Short-Chain Fluorochemical Technology (meets the goal of the US EPA 2010/2015 PFOA Stewardship Program)
- Partially Fluorinated material that provides exceptional protection for hard surfaces with little or no change in appearance
- Excellent Oil and Water Repellency and Hold-Out resists soils, stains, chemical degradation, efflorescence
- Vapor permeable for reduced cracking, spalling, freeze/thaw damage
- Water based and non-VOC (no intentionally added VOC)
- · Ambient cure for ease of use
- Readily dilutes in water/alcohol/glycol mixture with excellent shelf stability
- Non-Acidic for safe use on surfaces that will etch such as polished limestone and marble
- Good stability on alkaline surfaces such as concrete, grout and masonry
- Physically and chemically bonds to substrates
- · UV resistant for increased coating life
- Treated surfaces are easier to clean, and improves newness retention
- WERCS ID number: WPS1284451
- WERCS Validation number: 1284451

## **Applications**

- Stone, masonry
- Marble, limestone, concrete/masonry
- Saltillo tile, clay tile, stucco
- Granite, terrazzo, most stone surfaces
- · Grout, mortar

#### **Technical Information**

Thetaguard HS-3035 is a partially fluorinated product designed for OEM and aftermarket, ambient cure application to hard surfaces. While it offers protection to a broad range of surfaces, it has been specifically designed to provide exceptional oil, alcohol, and water repellency on stone, masonry, and fine stone and concrete of all types.

This anionic fluorochemical dispersion can be co-applied with other materials, and stands out compared to other fluorochemical hard surface protectors because it is compatible with a broad range of materials and delivers excellent water repellency in their presence. Thetaguard HS-3035 allows you to use one product across a broad range of hard surfaces with superior results.

Thetaguard HS-3035 is a concentrated product that readily dilutes in deionized or softened water and aqueous cosolvent solutions with exceptional storage stability even after dilution. Thetaguard HS-3035 is non-VOC.

# **Formulary**

# Mix Thetaguard HS-3035 before use.

Hard surface applications will vary depending on the surface and the performance required, but typically 10% Thetaguard HS-3035 will provide excellent repellency on fine stone, concrete, brick, stucco, pavers and tile when applied at the rate of 1 gallon per 200 to 400 square feet. Low porosity stones and surfaces will yield higher coverage.

# **Typical Properties**

PROPERTY	VALUE
Appearance	Beige to tan emulsion
Odor	Mild
Ionic character	Anionic
Water solubility	Dispersible
Solids, %	25.5 - 28.0
pH (as is)	9.0 ± 1.0
Density@25°C	1.14 ± 0.02 g/ml
Boiling Point	100°C
Flash point	None
Storage	Protect from freezing
Shelf life	12 months

## **Packaging and Handling**

Thetaguard HS-3035 is available in: 275 gallon totes (Net Wt. 2205 lbs) 55 gallon plastic drums (Net Wt. 440 lbs) 5 gallon pails (Net Wt. 40 lbs)

Note: This product cannot be spray applied, by agreement with EPA.

For further Safety Information, please refer to the Safety Data Sheet (SDS) for information on the safe use, handling, and disposal of this product.

DOT Classification: Non-Regulated

Whether you're looking for a replacement product or an ingredient for a specific attribute, give us a call. We can provide assistance based upon your particular formulation requirements and composition; please feel free to contact us.

Please refer to back page for important information

# Thetaguard™ HS-3035 Application Guidance

Recommended dilution rates vary from 6-15% of Thetaguard HS-3035 depending on the application, application rate, porosity of the substrate, desired performance and cost parameters. To improve wetting and penetration into particularly dense stones, and to improve dispersion clarity, up to 5% of a polar organic solvent can be added.

Excess liquid applied to a substrate should be wiped up if it has not penetrated after 15-20 minutes to avoid hazing from over-application of the product.

Note: Cure time for maximum water protection is approximately 24-48 hours; however, repellency will start to develop almost immediately. Application rates, concentration of Thetaguard HS-3035, and temperature/humidity can impact dry/cure times.

#### Formulations Guidance

Thetaguard HS-3035 offers formulation advantages over traditional Stone & Masonry protectors with better water solubility, allowing for higher aqueous concentrations, with or without co-solvent, for use on porous substrates such as sandstone.

### **Example formulations**

Penetrating Stone & Masonry Sealer		
Ingredient	Wt. %	
Water, deionized <sup>(1)</sup>	to 100	
Thetaguard HS-3035 (mix before use)	15	
Hard water chelant <sup>(2)</sup>	q.s.	
Preservative <sup>(3)</sup>	q.s.	
Polar organic solvent <sup>(4, 5)</sup>	q.s.	

#### Formulation notes:

- (1) Thetaguard HS-3035 is sensitive to hard water. We recommend using deionized or soft water for optimum solution stability and performance.
- (2) If deionized water is not available or practical, the addition of a hard water chelant such as salts of EDTA or NTA, or other chelants, is recommended to reduce hard water ion concentration to less than 10 ppm.
- (3) For long-term storage, addition of a preservative is recommended. Some preservative candidates include Nipacide BIT 20, Dantogard Plus (granular), Proxel GXL, and VeriGuard 19S. Typically these preservatives are effective at concentrations between 0.05 % and 0.20% on weight of final product, but should be determined by the formulator.
- (4) For improved wetting and penetration into particularly dense stones, up to 5% of a polar organic solvent, such as alcohols or glycol ethers, can be added.
- (5) The addition of up to 5% polar organic solvents is also recommended to improve the clarity of Thetaguard HS-3035 dispersions.

This information relates only to the specific material referred to herein and not to its use in combination with any other material or in any process, unless explicitly stated herein. Such information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled; however, no warranty, guarantee or other representation is made as to its accuracy, reliability, or completeness, or regarding any liabilities arising from others' intellectual property rights. ID# 20240412. Revision 2.

