Thetaguard™ AM-2030

Water dilutable dry soil-resist surface protectant

Overview

- Short-Chain Fluorochemical Technology (meets the goal of the US EPA 2010/2015 PFOA Stewardship Program)
- Ambient cure, soil and stain surface protection performance for Carpeting, Upholstery and Leather
- Readily dilutes in water
- Concentrates and Ready-to-Use dilutions are elevated temperature and freeze/thaw stable
- Colorless and non-yellowing
- Imparts exceptional soil and stain protection to surfaces with little or no change in appearance
- Excellent Oil and Water Repellency with durable Dry Soil Resistance
- Readily dilutes in water with excellent temperature and freeze/thaw stability
- Water based with low VOC (less than 100g/L, as delivered) content
- Best-in-Class performance meets or exceeds current Industry soil and stain protection offerings
- Treated surfaces are easier to clean, and improves newness retention
- Designed for ambient cure performance, AM-2030 is perfect for coater application to polyolefin and other heat sensitive fabrics.
- Performance summary-

  Water/Alcohol repellency:
  4-6 with average of 5-6
  Dry Soil resistance:
  Equal to or better than competitive carpet protectors after soiling and vacuuming

Applications

- Ambient cure Carpet, Upholstery, and Leather Soil and Stain Protectors
- Mill application for heat sensitive fabrics

Technical Information

Thetaguard AM-2030 is a partially fluorinated product designed for aftermarket, ambient cure, soft surface soil and stain protection applications. While it offers protection to a broad range of surfaces, AM-2030 has been specifically designed to impart soil and stain protection, through optimal water and oil repellency with durable dry soil resistance, when applied to carpeting, upholstery and leather.

Thetaguard AM-2030 is a pre-formulated concentrate that readily dilutes in water, exhibiting exceptional storage stability properties. Environmentally responsible, products formulated with Thetaguard AM-2030 meet all current VOC regulations.

Formulary

Simply dilute Thetaguard AM-2030 in water. Recommended dilution rates vary from 1 part AM-2030 in 24 parts water (4%) to 1 part AM-2030 in 9 parts water(10%) depending on application rates, application method, porosity of the substrate, desired performance, and cost parameters.

The addition of a preservative is recommended for packaged dilutions. Preservatives should be selected and evaluated by the formulator to determine use concentration, effectiveness, and formulation stability. Contact your preservative supplier for guidance and recommendations.

Typical Properties

PROPERTY	VALUE
Appearance	Hazy, off-white emulsion
Odor	Mild
Ionic character	Cationic
Water dispersibility	Stable, translucent emulsion
pH (as is)	4.5±1.5
Density@25°C	1.04±0.02 g/ml
Boiling Point	100°C
Flash point	None (aqueous)
Shelf life	12 months Protect from freezing

Packaging and Handling

Thetaguard AM-2030 is available in:
275 gallon totes (Net Wt. 2200 lbs)
55 gallon plastic drums (Net Wt. 440 lbs)
5 gallon pails (Net Wt. 40 lbs).

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

Thetaguard™ AM-2030 Formulation Guidance

Dilution rates
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Carpeting
With Best-in-Class performance on carpeting, Thetaguard AM-2030 imparts soil and stain protection when diluted to 6-10% and applied at a rate of 1 gallon per 200-600 square feet, where typical product recommendations are 10% dilutions with application rates of only 1 gallon per 200 square feet.

Apparel, Upholstery and Leather
For exceptional soil and stain resistance, dilute Thetaguard AM-2030 to between 4 and 10% in water, and apply uniformly at a rate of 1 to 2 fluid ounces per square yard. 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: Ambient temperature cure time for maximum protection is approximately 24 hours, although most formulations should dry to the touch within 1-2 hours. Application rate, concentration of Thetaguard AM-2030 applied, and temperature/humidity can impact dry/cure times.

Performance Data
Dry Soil Resistance and Water/Alcohol Repellency

Preparation of Test fabric surface treatment
1 part of Thetaguard AM-2030 was diluted with 9 parts water and sprayed on a variety of fabrics ranging broadly in construction, end-use, and composition. Application rate was approximately 1.5 fluid ounces per square yard of fabric which was sufficient to evenly wet the fabrics. Treated fabrics were allowed to dry and cure overnight (24 hours).

Dry Soil Resistance with Soil Release Demonstration (ASTM 6540 Method)
With Best-in-Class performance on carpeting, Thetaguard AM-2030 demonstrates superior soil and stain protection when compared with the Leading National Product versus Untreated Control, with results illustrated below:

Thetaguard AM-2030 | Untreated Control | Leading National Product

Water/Alcohol Repellency Drop Test (DuPont Test Method)
Water and Oil repellency are key determining performance parameters for textile soil and stain resistance, with fabrics that repel soiling and staining liquids being more resistant. Fabrics treated with Thetawet AM-2030 not only exhibit durable dry soil resistance, but are highly repellent to soiling and staining liquids.

To evaluate the relative repellency of a treated fabric, the Water/Alcohol Repellency Drop Test is commonly used. In this test, a series of wetting solutions with increasing wetting power are applied to a treated test fabric or carpet section, with treated surfaces repelling the strongest wetting solution achieving the highest repellency rating. Repellency was measured by applying 3 drops of test liquid and observing wetting of the treated surfaces. Test liquids ranged from weakly wetting 2% isopropanol in water (1 rating) to strongly wetting 50% isopropanol in water (6 rating). The higher the concentration of isopropanol (higher number rating), of the drop not wetting the surface, the more repellent the surface. If the drops were repelled for longer than 10 seconds the surface was judged to be repellent to the test liquid.

The water repellency of the Thetaguard AM-2030 fabrics achieved high repellency ratings of 4 to 6, with the average rating of all fabrics tested averaging 5 to 6, versus a rating of 1 for the untreated controls, indicating a strong resistance to soiling and staining liquids.