



Thetaguard™ AM-2040

Short-Chain anti-soiling soft-surface protectant

Overview

- Short-Chain Fluorochemical Technology (meets the goal of the US EPA 2010/2015 PFOA Stewardship Program)
- Ambient cure, anti-soiling surface protection performance for Carpeting, Upholstery and Leather
- Best-in-Class performance meets or exceeds current Industry anti-soiling protection offerings
- Compatible with a range of anionic stain-resist chemistries
- Colorless and non-yellowing treatment
- Imparts exceptional anti-soiling protection to surfaces with little or no change in appearance
- Exceptional 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
- Treated surfaces are easier to clean, and improves newness retention
- Designed for ambient cure performance, AM-2040 is perfect for coater application to polyolefin and other heat sensitive fabrics.
- Performance summary-

Water/Alcohol repellency:

2-4 with average of 3

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-2040 is a partially fluorinated product designed for aftermarket, ambient cure, soft surface anti-soil protection applications. While it offers protection to a broad range of surfaces, AM-2040 has been specifically designed to impart anti-soil protection when applied to carpeting, upholstery and leather. Thetaguard AM-2040 is compatible with a wide range of ICT anionic stain resist chemistries.

Thetaguard AM-2040 is a pre-formulated concentrate that readily dilutes in water, exhibiting exceptional storage stability properties. Environmentally responsible, products formulated with Thetaguard AM-2040 meet all current VOC regulations.

Formulary

Mix before using.

Simply dilute Thetaguard AM-2040 in water. Recommended dilution rates vary from 1 part AM-2040 in 19 parts water (5%) to 1 part AM-2040 in 6-7 parts water (15%) 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 | Off-white emulsion |
| Odor | Mild |
| Ionic character | Anionic |
| Water solubility | Dispersible |
| Solids, % | 21.5-23.5 |
| pH (as is) | 8.5±1.0 |
| Density@25°C | 1.08±0.02 g/ml |
| Boiling Point | 100°C |
| Flash point | None (aqueous) |
| Storage | Freeze/thaw stable Mix before using |
| Shelf life | 12 months |

Packaging and Handling

Thetaguard AM-2040 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)

In spray applications, use a coarse spray device, such as a trigger sprayer or pressurized dispenser, that does not produce respirable fine particles.

DO NOT AEROSOLIZE OR ATOMIZE.

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™ AM-2040 Formulation Guidance

Dilution rates

Recommended dilution rates vary from 1 part Thetaguard AM-2040 in 19 parts water (5%) to 1 part AM-2040 in 6-7 parts water (15%) depending on application rates, application method, porosity of the substrate, desired performance, and cost parameters.

Carpeting

With Best-in-Class performance on carpeting, Thetaguard AM-2040 imparts anti-soiling protection when diluted to 5-15% 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 anti-soil performance, dilute Thetaguard AM-2040 to between 5 and 15% 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.

Compatible with Performance

Enhancing additives

Thetaguard AM-2040 performance can be further enhanced with Stain-Blockers such as Flexisperse AM-210, or for packaged dilutions, Freeze-Thaw additives such as Flexisperse FTA-2.

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-2040 applied, and temperature/humidity can impact dry/cure times.

Application Guidance

Use any good quality, clean pressure sprayer, either electric or hand-operated. Stainless steel or plastic tanks are recommended to prevent rusting or staining. Use a TeeJet 8004 VisiFlo Even Flat Spray Nozzle or similar for a consistent distribution throughout the flat spray pattern. Spray pressure should not exceed 60 psi.

Do not aerosolize or atomize this product.

Hold the spray nozzle 12–18 in from the carpet, and apply half the prepared mix over the entire carpet area, spraying in one direction only. Then apply the other half over the entire carpet area, spraying in the opposite direction.

- Be certain to maintain enough spray pressure to ensure a uniform spray pattern.

Note: It is extremely important to obtain uniform coverage. Uneven application may result in uneven soiling.

To obtain the best performance, work the product into the carpet immediately after spraying.

- Use a pile brush on pile-type construction.
- Use a shag rake for open shag construction.

Allow the carpet to dry. Soil and stain protection will be effective as soon as the carpet is dry to the touch, typically 1-2 hours, reaching maximum protection in 24 hours. Use a damp cloth or sponge to wipe away spray from furniture or woodwork. Dried solid AM-2040 usually can be removed by using a mild detergent solution.

Performance Data

Dry Soil Resistance, Stain Resistance

Preparation of Test fabric surface treatment

1 part of Thetaguard AM-2040 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 3.0 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-2040 demonstrates superior anti-soil protection when compared with the Leading National Product versus Untreated Control, with results illustrated below:



Thetaguard
AM-2040

Untreated
Control

Leading National
Product

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# 20190322