

SYNTEC – 6550

SYNTEC-6550 is a water-based fluorochemical water and oil repellent finishing agent that provides excellent soil resistance on upholstery fabrics and carpets. Designed for use in the after-market treatment of textiles, SYNTEC-6550 is designed to protect home furnishings and automotive upholstery from wet and dry soiling, and impart water and oil repellency. SYNTEC-6550 produces a durable finish, helping treated fabrics and carpets retain their fresh new look longer. SYNTEC-6550 can be used on all types of upholstery fabrics and carpets made from synthetic or natural fibers and their blends. Typical applications are done from aqueous solutions of SYNTEC-6550 by the spray/air dry method.

MATERIAL DESCRIPTION

Appearance:	Off white, milky emulsion
Ionic Characteristic:	Nonionic
Solid Content:	30%
Solvent:	64% Water 6% Dipropylene glycol monomethylether
pH:	4.2
Specific Gravity:	1.05

CHARACTERISTICS

- Air Dry: Does not require heat curing to develop water, oil and soil resistant properties.
- Versatile: A single product that is effective on all types of fabric and carpet substrates.
- SYNTEC-6550 is easy to use as a result of the fine particle size emulsion.
SYNTEC-6550 dilutes readily in water for spray/air-dry applications.
- SYNTEC-6550 is non-flammable.

APPLICATION

Application can be done by spraying, followed by complete drying at ambient temperature. Add-on levels depend on fiber and construction, as well as level of performance desired. In general, 4 to 10 ounces/gallon dilution is sprayed at approximately 2-ounces/square yard, followed by air-drying. A uniform spray is essential to insure an even, optimum treatment.

PERFORMANCE DATA

Fabric specimens of 100% Cotton Sheeting, 50%/50% Cotton/Polyester, and 100% Nylon 66 were treated with SYNTEC-6550 at 1% and 2% solids. Each dilution was applied by spray. Approximately 90% to 100% ($\pm 10\%$) wet pickup was achieved. Samples were allowed to air dry for approximately 18 hours, and then evaluated for oil and water repellency before and after 10 cycles of abrasion using AATCC test method procedures.

The following are results for Syntec-6550

Flouropolymer Concentration (%)	Water Repellency Rating	Oil Repellency Rating	Water Repellency Rating (after abrasion)	Oil Repellency Rating (after abrasion)
1% on Cotton	4	3	3	2
1% on Cotton/Polyester	4	2	3	1
1% on Nylon	1	0	0	0
2% on Cotton	5	5	4	4
2% on Cotton/Polyester	4	2	3	1
2% on Nylon	1	0	0	0

The water and oil repellency rating numbers are based on the following:

Water Repellency Water Rating No.*	IPA Concentration	Water Concentration	Oil Repellency Oil Rating No.*	Oil Composition
1	2.00%	98.00%	1	Kaydol Mineral Oil
2	5.00%	95.00%	2	65/35 Kayhol/n-Hexade
3	10.00%	90.00%	3	n-Hexadecane
4	20.00%	80.00%	4	n-Tetradecane
5	30.00%	70.00%	5	n-Dodecane
6	40.00%	60.00%	6	n-Decane
7	50.00%	50.00%	7	n-Octane
8	60.00%	40.00%	8	n-Heptane
9	70.00%	30.00%		
10	80.00%	20.00%		

Procedure for Determining Oil and Water Repellency:

Beginning with the highest numbered test liquid, carefully place one drop in several locations on the fabric. Repeat with lower numbered liquids until the lowest number is reached that does not wet out the surface in 30 seconds (oil) or 10 seconds (water).

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4	20.00%	80.00%	4	n-Tetradecane
5	30.00%	70.00%	5	n-Dodecane
6	40.00%	60.00%	6	n-Decane
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MATERIAL SAFETY DATA SHEET

A Product of:
N. Y. Fire-Shield, Inc.
24 Victory Lane
Dracut, MA 01826

Date: 01-01-2004
Ref. No. 6550
Telephone: 315-255-1006
Contact: Patrick Bumpus

SECTION I - PRODUCT IDENTIFICATION

Trade Name: SYNTEC 6550

Chemical name / synonyms: Perfluoroalkylacrylate emulsion

Formula: None Regulated, Class 55

HIMIS CODE: Health 1, Fire 0, Reactivity 0

HIMIS KEY: 4=Extreme, 3=High, 2=Moderate, 1=Slight, 0=insignificant

SECTION II - HAZARDOUS INGREDIENTS

Substance	% Composition	TLV
Acetic Acid CAS# 64-19-7	< 1	10 ppm
Dipropylene glycol monomethyl ether CAS# 34590-94-8	6	100 ppm

SECTION III - PHYSICAL DATA

Boiling Pt. (°F): 208
Vapor Pressure (mm Hg): NA
Vapor Density (air=1): NA
Solubility in water: miscible
Appearance and Odor: Off-white milky liquid, sweetfish odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Pt. (°F): Does not flash
Test method: Closed cup
Extinguishing Media: As necessary for surrounding fire.
Special fire fighting procedures: NA
Unusual fire and explosion hazard: NA

SECTION V - HEALTH HAZARD DATA - ROUTES OF ENTRY

Threshold Limit Value: See Section II
Acute Health Hazards: No Information Available
Chronic Health Hazards: No Information Available
Carcinogenicity: ND
Signs and Symptoms of Exposure:
Skin Contact: May be harmful.
Eye Contact: Causes irritation.
Inhalation: May be harmful if inhaled.
Medical Condition Generally Aggravated by Exposure: No information available.
Emergency First Aid Procedures: EYES- flush with plenty of cool water for at least 5 minutes. If irritation persists, obtain medical attention. SKIN- remove contaminated clothing and launder before reuse. Wash skin with soap and water.
INHALATION- remove person to fresh air. Administer artificial respiration if indicated. Obtain immediate medical assistance. INGESTION- drink plenty of water or dilution effect. Do not induce vomiting. Call physician or poison center immediately.

SECTION VI - REACTIVITY DATA

Stability: stable
Conditions to avoid: Over heating, freezing.
Incompatibilities: Oxidizers, metalchlorides and acids.
Hazardous decomposition products: May produce HF
Hazardous polymerization products: Will not occur.

SECTION VII - SPILL OR LEAK PROCEDURE

Steps to be taken if material is released or spilled: Large spills: Dike and contain. Place in non-leaking containers for disposal agency. Soak up with sawdust, sand, oil dry or other absorbent material.

Waste disposal method: As in accordance with EPA and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection: Not necessary ordinarily. If burned or heated to combustion, use a gas mask.

Ventilation -- local exhaust: no

Mechanical exhaust: no

Protective gloves: Avoid excessive contact.

Eye protection: chemical goggles, if contact is likely.

Other protective equipment: none

SECTION IX - SPECIAL PRECAUTIONS

Precautions to be taken in handling and storage: Store above 35°F.

Other precautions: KEEP OUT OF REACH OF CHILDREN

ND means NOT DETERMINED on this form.

NA means NOT APPLICABLE on this form.

The information on this Material Safety Data Sheet reflects the latest information and data that we have on hazards, properties, and handling of this product under the recommended conditions of use. Any use of this product or method of application, which is not described on the label or in the Product Data Sheet is the responsibility of the user.

This Material Safety Sheet was prepared to comply with the OSHA Hazard Communications Regulation and Massachusetts Right to Know Law.