



Protect What Matters

What is FireShield™?

An all-natural spray for water-absorbent materials such as wood, wool, and cotton. FireShield™ is also suitable for many synthetic materials like polyester and various plastics.

Built to take the heat

Properly apply FireShield™ to create an instant barrier against heat and flame up to 5400 °F (3000 °C). (See Applications)

Revolutionary Science

FireShield™'s water-based and non-toxic formula is free of Polybrominated Diphenyl Ethers (PBDEs) and Volatile Organic Compounds (VOCs).

Safety Data

FireShield™ has been laboratory tested to be safe in and around the house, around pets, the outdoors and in large-scale industrial applications. (See Safety Data)

Stewardship

FireShield™ is proud to be an eco-friendly leader in creating socially responsible solutions to everyday challenges.

Integrity

FireShield™'s performance has been certified by multiple National and International agencies as a critical fire prevention method. (See Certifications)

APPLICATIONS

FireShield™ can be applied to any water-absorbent, natural material such as cotton, wool, linen, and wood in addition to synthetic materials including polyester and various plastics. One application renders properly treated materials non-flammable.

Instructions:

1. Press to unlock the FireShield™ spray nozzle
2. Hold bottle up to one foot from material
3. Apply FireShield™ evenly over material
4. Allow material to dry completely
5. Drying times will vary based on material

Product Notes

FireShield™ formula creates a protective barrier free of Polybrominated Diphenyl Ethers (PBDEs) and Volatile Organic Compounds (VOCs). Re-apply FireShield™ to materials if they are cleansed or sanitized.

Deflector's Brand Mission

We are committed to sustainable practices for our environment, our communities, and natural resources. Our pledge is to produce eco-friendly, and socially responsible solutions to everyday challenges.

FREQUENTLY ASKED QUESTIONS

With so much versatility and very few limits, the question isn't how it works. It's how to make it work for you? What to protect first? With whom should I share FireShield™?

What is the difference between a fire inhibitor and a fire retardant?

Fire retardants serve as a temporary barrier to resist fire for a period of time, FireShield™ is a fire inhibitor which renders properly treated materials non-flammable.

What materials are best to treat with FireShield™?

Any water-absorbent material like cotton, wool, linen, wood, and some synthetic materials like polyester and various plastics.

If I treat my curtains with FireShield™ and at some point get them steam cleaned, do I have to re-apply FireShield™?

Certainly, when the bond created by our product is compromised by a solution or cleansing process, FireShield™ should be reapplied.

How much FireShield™ do I use to make sure what I treat is will not catch fire?

We ask that you take into consideration the type of material being treated, and its saturation point. Properly applying FireShield™ and allowing it to dry will convert your material into a barrier from fire.

How long does FireShield™ take to dry?

The drying time will vary based on the type of material being treated, however after spraying, dipping or padding you will be able to feel with your hand if it has completely dried.

Is FireShield™ pet-friendly?

Yes. The FireShield™ formula contains neither Volatile Organic Compounds (VOCs) nor Polybrominated Diphenyl Ethers (PBDEs) which are present in other consumer products found in the home and office.

What is the shelf life of my bottle of FireShield™?

The FireShield™ formula remains effective for up to three years, after that the potency starts to diminish.

Can I purchase FireShield™ from a retail store?

Not yet, however check back often or follow our social media to learn where FireShield™ can be purchased.

Is FireShield™ the only product Deflector makes?

No, and in the coming months we will introduce several precautionary and lifestyle brand spray products.

CERTIFICATIONS

The strength and integrity of FireShield™ has been certified through rigorous flammability testing conducted in the USA, Canada, UK, Singapore and Malaysia to meet and exceed various UL, ASTM, NFPA and British Standard (BS) requirements.



Underwriters Laboratories of Canada



National Fire Protection Association



Consumer Product Safety Commission



ASTM International



Canadian Institute of Steel Construction

The impressive results are exemplified by tests on FireShield™-treated cotton and natural fiber blends, which achieved the highest possible rating, Class 0 and Class 1 for BS 476, Part 6 and 7, respectively, NFPA 701 and 2112 which are exhaustive tests typically used to evaluate the flammability and thermal protection of building materials.

FireShield™ has also passed Civil Aviation Authority (CAA) and Federal Aviation Authority (FAA) standards for use on airplane cabin fabrics. We are excited about new certifications for use in many other advanced applications.

16 CFR 1633 - Mattress Flammability

Ortho Posture twin mattress

CAN/ULC -S102 (same as ASTM-E84)

#2 Btr. S4S KD Pine (2x8?)

NFPA 701 - Flame Propagation of Textiles

Fire Blanket

NFPA 2112 - Flash Fire Protection

Fire Blanket

ASTM-E84 - Surface Burning Characteristics

Douglas Fir 2x4 lumber

ASTM B117 - Salt Spray (20hr)

Steel I-beams (corroded)

ASTM D4108 - Thermal Protective Performance

Black Twill Nomex

ASTM D3201 - Hygroscopicity

SYP Lumber and Plywood

CISC 1-73a & CISC 2-75

Steel Q-panels

CISC 1-73a & CISC 2-75

Steel Q-panels

CISC 1-73a & CISC 2-75 - Water Immersion only

Steel Q-panels

ASTM D6413 - Vertical Burn Test

100% Cotton - Oxford Blue

ASTM D6413 - Vertical Burn Test

Black Twill Nomex

ASTM D6413 - Vertical Burn Test

Greige Fabric

ASTM D6413 - Vertical Burn Test

Greige Cotton Fabric

ASTM D6413 - Vertical Burn Test

5.5 oz cotton - treated & untreated

ASTM D3806 - 2-Foot Tunnel Screening Test

1/2" Western Plywood CDX

ASTM D3806 - 2-Foot Tunnel Screening Test

1/2" Western Plywood CDX

ASTM D3806 - 2-Foot Tunnel Screening Test

3/4" Western Plywood CDX

ASTM D3806 - 2-Foot Tunnel Screening Test

3/4" Western Plywood CDX

ASTM D3806 - 2-Foot Tunnel Screening Test

SPF 2x4 lumber

ASTM D3806 - 2-Foot Tunnel Screening Test

SPF 2x4 lumber

ASTM D3806 - 2-Foot Tunnel Screening Test

Western Red Cedar 2 x 4

ASTM D3806 - 2-Foot Tunnel Screening Test

White Oak 1 x 4

ASTM-E84 - Surface Burning Characteristics

Pine 1x12

ASTM-E84 - Surface Burning Characteristics

Pine 1x12

ASTM-E84 - Surface Burning Characteristics

Douglas Fir 2x4 lumber

ASTM-E84 - Surface Burning Characteristics

Douglas Fir 2x4 lumber

ASTM-E84 - Surface Burning Characteristics

Hem/Fir 2x4 lumber

ASTM-E84 - Surface Burning Characteristics

Douglas Fir 2x4 lumber

ASTM-E84 - Surface Burning Characteristics

Hem/Fir China T&G 1x6 lumber

ASTM-E84 - Surface Burning Characteristics

Hem/Fir China 2x4 lumber

ASTM-E84 - Surface Burning Characteristics

SYP 2x4 lumber

ASTM-E84 - Surface Burning Characteristics

1/2" SYP CDX Plywood

ASTM-E84 - Surface Burning Characteristics

1/2" SYP Soundboard

ASTM-E84 - Surface Burning Characteristics

1/2" Douglas Fir Plywood

ASTM-E84 - Surface Burning Characteristics

3/4" SYP T&G Plywood

ASTM-E84 - Surface Burning Characteristics

3/4" T&G Plywood

ASTM-E84 - Surface Burning Characteristics

Euro' 2x4 lumber

ASTM-E84 - Surface Burning Characteristics

GP Soundboard

ASTM-E84 - Surface Burning Characteristics

1/2" Western Plywood CDX

ASTM-E84 - Surface Burning Characteristics

1/2" SYP Plywood

ASTM-E84 - Surface Burning Characteristics

3/4" Western SturdiFloor T&G Plywood

ASTM-E84 - Surface Burning Characteristics

3/4" SYP T&G Plywood

ASTM-E84 - Surface Burning Characteristics

SPF 2x4 lumber

ASTM-E84 - Surface Burning Characteristics

SPF 2x4 lumber

ASTM-E84 - Surface Burning Characteristics

3/4" plywood (SYP or Western)

ASTM-E84 - Surface Burning Characteristics

GP Soundboard

ASTM-E84 - Surface Burning Characteristics

GP Soundboard

SAFETY DATA SHEET

DEFLECTOR FIRESHIELD™ FIRE INHIBITOR

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Identity (as used on label)	FireShield™
Manufacturer	Deflector, LLC.
Address	2731 N. Pulaski Rd Chicago, IL 60639 USA
Information / Emergency Telephone Number	888-651-6941
Recommended Use	Carpet, Upholstery, Drapery, Fabric, Wallpaper and Wood
Restrictions on Use	No special restrictions

SECTION 2 - HAZARDS IDENTIFICATION

The product is not classified.	
Hazardous Ingredients	None
Environment	Hazardous properties of the product in the environment are considered to be limited.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

The product contains water and a proprietary blend of inorganic ammonium salts, urea, and Deflector LLC's proprietary additive.

SECTION 4 - FIRST AID MEASURES

Inhalation	Move into fresh air. If symptoms persist, contact a physician.
Skin Contact	Wash affected area with soap and water. If skin irritation persists, contact a physician.
Eye Contact	Remove any contact lenses and flush eyes with water for up to 15 minutes. If eye irritation persists, contact a physician.
Ingestion	Immediately rinse mouth and drink plenty of water as a precaution. Keep subject under observation and contact a physician if adverse symptoms are observed.

SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing Media	The product is non-combustible. Use fire extinguishing media and procedures appropriate for surrounding materials.
Specific Hazards	None
Protective Equipment for Fire Fighters	Select respiratory protection and follow general fire precautions as indicated by surrounding area.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid inhalation of aerosols and contact with eyes and skin. Wear appropriate personal protection and follow precautions for safe handling as outlined in this data sheet.
Environmental Precautions	Avoid discharge into water courses or onto the ground
Clean-up Procedures	Contain and absorb spillage with sand, sawdust or other suitable absorbent material. Follow proper disposal procedures and rinse area with large amounts of water.

SECTION 7 - HANDLING AND STORAGE

Technical Measures/ Precautions	No special technical measures or precautions required.
Safe Handling Advice	Handle with good industrial hygiene and safety practices. Avoid contact with eyes, skin and clothing.
Safe Storage Conditions / Incompatible Products	Keep tightly closed in original container in a cool and dry location.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures	Ensure adequate ventilation.
Exposure Limits	No special precaution required.
Respiratory Protection	Use in well ventilated area.
Hand Protection	Protective gloves of latex, PVC or nitrile.
Eye Protection	Protective goggles or face shield.
Skin Protection	Lightweight protective clothing.

SECTION 9 - PHYSICAL / CHEMICAL PROPERTIES

Appearance	Clear liquid
Odor	No odor
Specific Gravity (approx.)	1.10
pH Solution at 20°C	5.8 - 5.9
Percent Solids (approx.)	18 – 20 % w/w
Boiling Point (approx.)	100°C (212 F)
Freezing Point (approx.)	- 15°C (0 F)
Solubility in Water (20°C)	Soluble
Flash Point	Non-combustible
Volatility	Non-volatile
Hygroscopicity	Slightly when dry
Fungal Resistance	Good
Bacterial Resistance	Good

SECTION 10 - STABILITY / REACTIVITY

Stability	Stable under normal conditions.
Conditions / Materials to Avoid	Strong oxidizing agents, alkalis, acids, bases. May be slightly corrosive to some metals or alloys.
Hazardous Decomposition Products	None under normal storage conditions. Thermal decomposition at high temperatures may lead to production of irritating gases or vapors.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity	Oral LD50 (rat): > 5000 mg/kg Eye Irritation (rabbit): non-irritating Dermal Irritation (rabbit): 0.0 (non-irritating)
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SECTION 12 - ECOLOGICAL INFORMATION

Mobility	Fully soluble in water
Biodegradability	No data available
Ecotoxicity	No data available
Bioaccumulative Potential	No data available
Other Adverse Effects	No data available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of waste and residues according to local authority requirements.
No special disposal required.

SECTION 14 - TRANSPORT INFORMATION

This product is NOT covered by international regulations on the transport of dangerous goods
(IMDG, IATA, ADR/RID)

SECTION 15 - REGULATORY INFORMATION

N/A

SECTION 16 - OTHER INFORMATION

Date Prepared

January 1, 2017

Prepared By

Deflector, LLC.

The information and recommendations in this publication represent our current data and best opinion as to the proper use and handling of this material under normal conditions. Any use of the described material which is not in conformance with this publication or which involves using the described in combination with any other material or any other process is the responsibility of the user.



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