

FIRE-POOF™
PRODUCT DATA SHEET
INTERIOR FLAME RETARDANT
FOR FABRIC, WOOD, CARDBOARD and
OTHER DECORATIVE MATERIALS



FABRIC PRODUCT DESCRIPTION: Fire-Poof™ is an interior non-hazardous, water-based flame retardant for most textile fibers, raw wood and OEM uses. Fire-Poof™ is easy to use and has no smell; one product for most fibers. No need to buy more than one product.

TECHNICAL DATA:

Weight - 5-gallon pail is 50 lbs (ready to use), ph=6.5-7. Available in all quantities.
May need up to 24 hrs. to cure depending upon fiber characteristics.
Appearance - appearance of water.
Store between 40° and 100°F. Shelf life, 5 years if unopened. Keep container closed at all times.
Fire-Poof is water-soluble. Do not allow treated surface to come in contact with liquid.
Do not add water or change chemical composition in any way. Always make sure cap stays on container.
Do not expose to heat above 300° f. after application.
Certification requires application by a CA State Certified Applicator to meet requirements of the CA State Fire Marshal.
Water based product, do not allow product to come in contact with any metal surfaces.

COMMERCIAL APPLICATION APPROVALS:

Wood Approvals: Class A / Class 1 ASTM E-84 on Plywood, Class B / Class 2 on Birch. CA Title 19 1236.4, NFPA 255, UL 723, UBC 42-1
Fabric Approvals: NFPA 701 & CA Title 19 1237.1, No. C-26501, NYC COA #5687, CAN/ULC-S109-03, CAN/ULC-S109-14, Small and Large Scale, FAA 25.853, NFPA 260, BFD 1X-1, ASTM E84, CA 117, UFAC, Class 1. BS 5867 Part B. Please inquire about detailed fiber testing.

READY TO USE APPLICATION INSTRUCTIONS ARE LISTED BELOW

Users of this product must determine the suitability of this product for its intended use. Do not use an airless sprayer as the pressure can atomize the product, which can prevent proper performance. Recommend wear of chemical resistant gloves, goggles and N95 mask for protection. Fire-Poof is ready to use. Pre-vacuuming or cleaning may be needed prior to application. Test for dye stability in inconspicuous area. Some unstable dyes, especially reds are prone to bleeding. We are not responsible for any aesthetic changes that may occur. Apply to clean surface free of dust and dirt with a, "Hudson" type orchard sprayer with a fan spray tip at 40-100 PSI. Spray all exposed surfaces. Other coatings, glue, etc. can increase flame spread and must be tested as a system.

For Fabric: 200-800 square feet per gallon depending on the fiber content and density of the item being treated. All surfaces must be free of dirt or coatings. Testing results by a trained professional will determine chemical amount and cure time if needed. May need to be applied to both sides of the textile to ensure all areas are treated with Fire-Poof™. Not effective on 100% nylon, acetate, acrylic, plastic, metal or surfaces with water, glue or stain / water repellent. Sizing, oil and dirt can also prevent absorption. May be effective over scenic paint but must be tested for use with specific paint being used.

For Wood: All wood must be free from coatings such as paint, sealant or dirt. Apply 150 square feet per gallon to raw wood to achieve Class A or Class 1 rating and 250 sq. ft./gal. for Class B or Class 2 rating.

Cardboard: Apply to all sides at approximately 195 square feet per gallon. Thicker cardboard may need to be submerged for Fire-Poof to penetrate all sides and middle of cardboard. Length of dipping or spray time may vary depending upon thickness of cardboard to determine absorption effectiveness and desired strength.

Other material: may also need to be submerged until positive results have been achieved. Length of time may vary depending upon substrate saturation capabilities.

CLEAN-UP:

Flush sprayer and tips with warm water and wash hands with soap and water.

CAUTION:

Keep out of reach of children. Do not ingest. Call physician if swallowed. Clean with soap and water all contacted areas. Flush eyes with chemical eye wash or flush eyes with cool water for at least 15 minutes. If irritation persists, seek advice of a Physician.

WARRANTY AND DISCLAIMER:

Use only as directed. Sellers and Mfrs. only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or inability to use the product. The user assumes all risk and liability whatsoever in connection therewith. Any statement or recommendation not contained herein shall have no force or effect unless contained in an agreement signed by officers of seller and manufacturer. Deterioration of coatings can occur due to cleaning, atmospheric and other conditions. Fire Retardants shall possess the desired degree of permanency and shall be maintained to retain the effectiveness of the treatment under the service conditions encountered in actual use. Periodic testing by a trained official should be performed to insure flame-retardant effectiveness.

FIRE-POOF™ FLAME RETARDANT

IMPORTANT INFORMATION

FOR SOFT-GOODS

FIRE-POOF™ **MAY NOT BE EFFECTIVE WITH THE FOLLOWING SURFACES**
(additional testing may be needed)

- PAINTED
 - ACETATE
 - PLASTIC
 - SOME ACRYLICS
 - ON TOP OF SURFACES WITH WATER OR STAIN REPELLANT. BUT FLAME-RETARDANT MAY WORK WELL WITH STAIN OR WATER REPELLANT ON TOP OF THE FABRIC.
 - STARCH OR SIZING, (may resist or cause the Fire-Poof™ to perform inconsistently)
 - TEXTILES WITH MORE THAN 10% SPANDEX OR LYCRA
 - EXTERIOR OR UV PAINTED SURFACES SUCH AS UV SILK SCREENED INKS.
- NYLON
 - GLUE
 - METAL



- ◆ A cure time may be required for Fire-Poof™ to work. Usually no more than 24 hours, although most of the time, it will be effective upon drying.
- ◆ Do not use an airless paint sprayer or cup sprayer because its pressure is over 100 psi and may atomize the Fire-Poof™, thus; causing the flame-retardant to not penetrate the surface.
- ◆ Apply at 40-100 psi using a "Hudson" type sprayer.
- ◆ All items must be thoroughly dry before folding or rolling for storage or mold can develop.
- ◆ Do not put treated material in a plastic bag if damp or it can cause white residue or chalkiness. Flame Retardant can crystallize if not completely dry.
- ◆ Can cause fabric to shrink. Shrinkage can occur at different rates depending upon the fiber content of thread and fabric. If not careful, puckering can occur due to the different shrinkage rates of fabric vs. thread.
- ◆ Testing should be performed to all fabrics prior to application to verify chemical amount needed, cure time and flame-retardancy. Wet on all sides, but not dripping usually works best. Field testing should be performed by a trained, professional.
- ◆ NFPA 705 Field Flame Testing should be periodically performed by a trained professional to ensure compliance of flame-retardancy. Refer to www.nfpa.org/705
- ◆ It is the owner's responsibility to maintain the flame-retardancy of the material. Cleaning and re-treatment schedule is recommended. Check with your Fire Authority who can recommend how often to re-treat the surface. Dry cleaning is preferred as the Fire-Poof™ is water soluble. Re-treatment is recommended if the fabric comes in contact with enough liquid to dilute the flame retarding properties; or if the fabric gets dirty.
- ◆ All chemical safety requirements must be followed when applying Fire-Poof™. Chemical goggles, N95 mask and gloves should be worn when handling all chemicals.
- ◆ If Fire-Poof™ comes in contact with the skin and an open sore exists, it may sting; thoroughly wash and dry hands and do not repeat contact.
- ◆ Due to different body chemistries, Fire-Poof cannot guarantee against any physical reactions, although, oral and dermal testing has been performed and is shown to be safe to use.
- ◆ All California Flame-Retardants Application Certificates can only be provided by a Licensed California Certified Applicator.
- ◆ Fire-Poof™ is water based and may rust metal surfaces. Do not allow Fire-Poof to come in contact with metals.
- ◆ Fire-Poof™ is water soluble and can wash away upon contact with liquids.



FIRE-POOF™ FIELD TEST PROCEDURES FOR TEXTILES ONLY (DOES NOT APPLY TO WOOD)

These procedures are to be used if you would like to perform a, “Field Test”. **Check with your Safety Manager prior to performing this test.** If you chose to test samples proceed at your own risk. All safety guidelines must be followed to prevent life and property damage. Make sure that the area is free from draft and that there are no flammable items in or around the testing area. Have a certified fire extinguisher within reach. Tongs measuring a minimum of 8” should be used to hold the sample being tested. Make sure that while testing the sample, there is a 5-gallon pail of water below the sample so that the burned sample can drop into the 5-gallon pail of water safely.

Enclosed is information about how to perform a Field Flame Test. A copy of the official, NFPA 705 Field Flame Testing Procedure can be found at www.nfpa.org/705. This is used as a guideline by Fire Authorities to give them an idea of how decorative material will or will not burn. Use NFPA 705 Field Flame Testing Procedure after fabric has cured, (usually 24 hours after specimen has dried). Follow all safety precautions to ensure fire safety.

Listed below are instructions on how to apply Firepoof™ for testing purposes. This will give the applicator information as to how much flame-retardant must be applied and how long the cure time will be. Any shrinkage or dye stability should also be noted at this time. Please note that there are different test procedures for spandex. Please contact Firetect for information on spandex. Also, the most difficult fibers to treat are acetate, acrylic and nylon. Please see Firetect’s “Fire-Poof™ Flame Retardant Important Information for Soft-Goods”.

STEP 1: Cut 3 pieces of fabric to be tested. Each piece should be a minimum of 10”x10”.

Note size of pieces if testing for shrinkage as well.

STEP 2: Label one piece with the date, time of application, job description and, “1 side”

Label the second piece with the date, time of application, job description and, “2 sides”.

Label the third piece with the date, time and, “not treated”. This piece will be the, “Control Sample” used to observe the difference between treated and untreated. This should also be kept with your files.

For safety, chemical gloves, goggles and N95 mask should be worn when testing and spraying.

STEP 3: Using a spray bottle containing Fire-Poof™, spray the sample labeled, “one side” with Firepoof™ on the front side of the fabric. Observe how the Firepoof™ is absorbing and test for dye stabilization. If Firepoof™ absorbs to the back side of the fabric, this will be a good indication that only one side of the fabric will need to be treated in order to perform properly. Note how much needs to be sprayed, i.e. light, or heavy and also note how the fabric is reacting to the treatment.

STEP 4: Follow the same procedures in step 3, but spray both sides of the sample on the one labeled, “two sides”. The fabric needs to absorb the Firepoof™ on all sides; it does not need to be dripping.

STEP 5: Note how long it takes for the samples to dry.

STEP 6: Let cure for 24 hours in normal atmospheric conditions similar to the atmospheric conditions it will be used in. Average cure time is 24 hours before the flame-retardant will work, but sometimes, cure time can be longer.

STEP 7: Using all safety precautions, follow NFPA 705, Field Flame Testing Procedures at www.nfpa.org/705. That test is a 12 second flame test. We recommend testing the soft good in both the warp and the fill direction of the fabric.

Cure time is important. This is why the fabric must be treated a minimum of 24 hours, (or as long of a period that is required for cure time) prior to occupancy of the premises to ensure fire safety. Please call the Technical Support Department at Firetect® if you have any questions.



Safety Data Sheet (SDS) - Fire-Poof™ Flame-Retardant

1. Identification

Product Identifier Fire-poof Interior Flame Retardant
Other means of Identification Water-based flame retardant saturant.
Recommended use Refer to manufacturer sell sheet.
Recommended restrictions Refer to manufacturer sell sheet.
Manufacturer name Dharma Trading Co
Address 1805 S McDowell Blvd Ext
Petaluma, CA 94954
Country USA
Phone 707-283-0390
Fax 707-283-0379
E-mail service@dharmatrading.com
Website www.dharmatrading.com

2. Hazard(s) Identification

Emergency overview Irritant.
Classification
Hazard symbol Category 5. No symbol.
Signal word Warning.
Potential health effects
Inhalation May be harmful if inhaled. Short-term exposure may cause irritation of nose, throat, and lungs.
Eyes/Skin May be harmful in contact with eyes/skin. Short-term exposure may cause irritation.
Ingestion Ingestion of large quantities may cause symptoms of non-specific irritation of gastrointestinal tract, nausea, vomiting—seek medical attention. May be harmful in contact with eyes/skin. Short-term exposure may cause irritation.
Environmental hazards No known significant environmental effects.
NFPA/HMIS classification Health: 0
Flammability: 0
Reactivity: 0
0-Least, 1-Slight, 2-Moderate, 4-Extreme

3. Composition/Information on ingredients

Chemical name	CAS number	Percent
Water	7732-18-5	70-86%
Trade secret per 29 CFR 1910.1200	-	14-30%
NO REPORTABLE HAZARDOUS INGREDIENTS		

4. First-aid measures

Inhalation Remove person to fresh air. If necessary, seek advice of a physician.
Skin contact Wash skin with soap and water. Launder clothing before reuse.

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Eye contact	In case of eye contact, flush with running water for at least 15 minutes. If irritation persists, seek advice of a physician.
Ingestion	If swallowed, induce vomiting, seek medical attention.
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5. Fire-fighting measures	
Suitable extinguishing media	Carbon dioxide, dry chemical, foam, water spray.
Unsuitable extinguishing media	None.
Specific hazards arising from the substance or mixture	None.
Special protective equipment and precautions for fire-fighters	None.
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6. Accidental release measures	
Personnel precautions	None.
Environmental precautions	Avoid runoff into storm sewers, ditches, and waterways.
Cleanup measures	Spills should be contained, solidified, and placed in suitable containers for disposal. Wash exposed skin with soap and water.
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7. Handling and storage	
Precautions for safe handling	Avoid breathing mist. Avoid prolonged skin contact.
Engineering controls	Use local exhaust ventilation if sprayed inside. Otherwise, general ventilation is adequate.
Conditions for safe storage	Store upright in original sealed container in a cool, dry location away from light and strong frost.
Storage temperature	Store between 40°F and 100°F. Keep cap on container at all times.
Shelf life	Shelf life is 5 years, if unopened.
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8. Exposure controls/Personal protection	
VOC	0 Grams/Liter
Exposure controls	Use appropriate engineering controls such as proper ventilation. Where such systems are not effective, wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards.
Personal protective equipment	
Eye/Face protection	Wear goggles to avoid overspray and splashing. Eye and face protection should be in accordance with OSHA 29 CFR 1910.133.
Hand/Arm protection	Rubber or plastic gloves are recommended.
Respiratory protection	Use an N-95 or P-95 mask. If used in a confined area, use respirators in accordance with 29 CFR 1910.134(d)(3)(i)(A) Table 1, 29 CFR 1910.134(d)(3)(iii)(B) and 29 CFR 1910.134(d)(3)(iv)(B).
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9. Physical and chemical properties	
Appearance	
Physical state	Liquid.
Color	Clear.
Odor	Very faint odor.
Odor threshold	Not applicable.
pH	6.5-7.0
% volatile by vol	
Freezing point	32°F
Boiling point	212°F
Specific gravity	1.08
Evaporation rate	
Vapor pressure	Same as water.
Vapor density	Same as water.

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10. Stability and reactivity

Reactivity	No special reactivity.
Chemical stability	Stable under normal conditions.
Incompatible materials	May tarnish or react to metal, much like water would. Strong oxidizer.
Decomposition materials	None.

11. Toxicological information

Acute toxicity	
Potential health effects	
Inhalation	May be harmful if inhaled. Short-term exposure may cause irritation of nose, throat and lungs.
Eyes/Skin	May be harmful in contact with eyes/skin. Short-term exposure may cause irritation.
Ingestion	May be harmful if swallowed. Possible stomach irritation and nausea.

12. Ecological information

Eco toxicity	No data available.
Persistence and degradability	No data available.
Bio accumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No data available.

13. Disposal considerations

Waste disposal of product	Do not discharge product into storm or waste water sewer systems.
Contaminated packaging	Dispose of in accordance with federal, state, and local regulations.
Container disposal	Plastic pails are recyclable. Rinse well before recycling or disposal. Dispose of in accordance with federal, state, and local regulations. Contact local authorities for further information.

14. Transport information

Land transport	
USDOT	Non-hazardous product. Not regulated.
Marine transport	
IMDG	Non-hazardous product. Not regulated.
Air transport	
IATA	Non-hazardous product. Not regulated.

15. Regulatory information

Additional safety, health and environmental regulations	Not applicable.
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16. Other information

Complies with OSHA Hazard Communication Standard 29 CFR 1910.1200 and prepared to GHS.

Preparation information

Prepared by
Disclaimer

Firetect[®], Inc.
It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information given is presented in good faith and believed to be correct as of the date hereof, based on available data, material components, and similar materials. Firetect[®], Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used.