

SAFECOAT ® FR-31 Fire Retardant Treatment

Product Description

This product is a highly effective, economical and environmentally friendly fire retardant treatment for fabric of most types. It can be used as a fire retardant and impregnating agent on practically all water absorbent materials. SAFECOAT FR-31 can be applied by spraying, padding or immersion, or it can be incorporated directly into a product. The method of application depends on the type of material and structure of the fiber to be protected.

Features

- is an aqueous solution of inorganic salts. It is colorless and has a slight odor of ammonia in solution but is odorless when dry.
- is chemically neutral or slightly alkaline with a pH of 7.0 to 8.0. Its primary role is to act as a flame retardant.
- does not substantially affect the appearance or feel of the fabric if properly applied. The
 fabric remains soft and pliable. Since SAFECOAT FR-31 Fire Retardant Fabric
 Treatment is water soluble it can be washed out of both textiles and materials. Re-treat
 after laundering.
- is provided in a Ready-to-Use, liquid form.

Uses

Applications By Industry:

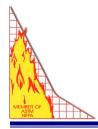
Convention / Hospitality	Military	Automobile	
Furniture	Mining	Recreation Complexes	
Carpet	Retail	Publishing	
Entertainment	Pulp and Paper	Food Service	
Residences	Libraries	Government	
Trade Shows / Exhibitions / Fairs	Theaters & Museums	Hospitals & Clinics	
Senior Citizen Homes	Public Office Buildings	Hotels & Convention Centers	
Nursing Homes	Long Term Care Facilities	Rodeo (straw)	

and other places of public assembly which are required to be furnished with fire resistant materials to protect the public, as well as property, against accidental ignition or arson.

Applications By Product Group:

Textiles:		Paper & Cellulosics:	
Lab Coats, Coveralls	Work Clothing	Trade show displays	Packaging
Velour	Wall Coverings	Straw and Hay	Cardboard
Drapery, Curtains	Cotton & Canvass	Decorations	Books & Documents
Carpets	Linen (Table Cloths)	Acoustic Tiles	Crepe Paper
Tents*	Upholstery	Wood chips, Sawdust	Fiber Roof Board

^{*}The water-soluble properties of SAFECOAT FR-31 Fabric Treatment limits these applications. Addition of a sealant is required to protect the Fire Retardant from leaching if exposed to water.



Technical Data Safecoat FR-31

Typical Properties of SAFECOAT FR-31 Fire Retardant Fabric Treatment:

Appearance/Odor Colorless free flowing liquid / slight ammonia odor

Specific Gravity 8.65 lbs/USG or 1.04 g/mL

% Volatiles/Vol 80%

Solids By Weight 20%

Solids By Volume Not available

PH 7.0 - 8.0

Dry Time Dependent upon fabric type and thickness

Coverage 1 to 1 (1:1) - i.e.: one pound of solution for one pound of fabric

Boiling Point Not available

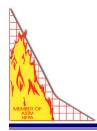
Storage Limits Store in cool dry location away from direct sunlight. Keep from

freezing, (above 32?F (0?C))

Packaging Available in one quart, one US Gallon and five US Gallon quantities.

Note: SAFECOAT FR-31 Fire Retardant Fabric Treatment is an aqueous solution of inorganic salts, chemically neutral or slightly alkaline with a pH value of 7.0 - 8.0. It has very low toxicology, but should be kept out of the reach of children. Read MSDS for detailed precautions.

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Instructions for the use of Safecoat FR-31

Typical Application

- SAFECOAT FR-31- Fire Retardant Fabric Treatment can be applied by spraying, coating or immersing a fabric at any point in the manufacturing process.
- do not dilute or mix with other products.
- check the fabric for color-fastness before starting the treatment.
- distribute solution evenly across the entire surface, ensuring that solution does not flow or drip to the extremes whenever possible.
- dry on a horizontal drying rack, at moderate temperature (between 70 and 175°F) for optimal results.
- tumble dry fabric in a warm dryer, (maximum temperature should not exceed 175?F).
- iron fabric using a warm iron (maximum temperature 200?F). Iron a small area first, to ensure the color is not affected.
- to spray **SAFECOAT FR-31 Fire Retardant Fabric Treatment**, use a hand held or back pack pressurized spray container with an atomizer nozzle. Filter the solution into the tank to keep out any solids that may plug the nozzle. With daily use, the sprayer must be flushed out with clean warm water.

Coverage rate

The required quantity depends on the absorbency of the material, its inherent flammability and its overall weight. As a rough guide:

- the maximum amount of **SAFECOAT FR-31 Fire Retardant Fabric Treatment** required is equivalent to the original weight of the material to be treated (80 to 100%).
- i.e.: if the dry fabric starts out weighing 1 lb., then it should pick up between 0.8 to 1 lb. of solution during treatment and retain an additional net added weight of 5.6 to 7 oz. after drying.

Fabric Cleaning and Care Instructions

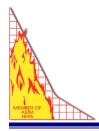
Detergents and water or shampooing (i.e.: of drapes, carpets, etc) will remove **SAFECOAT FR-31 Fire Retardant Fabric Treatment** and re-application will be necessary. Re-treat after laundering.

<u>Application to Straw, Paper and Other Cellulose-based Products</u>

Hay or Straw Bales for Display: Approximately 1 quart of SAFECOAT FR-31S Fire Retardant Treatment per bale is required for good penetration. Spray on with an atomizer nozzle.

Cardboard: Corrugated cardboard is best treated with a fine atomized spray on both sides. Do not soak material in any one spot for too long a period, since this will warp the cardboard and make it lose its shape.

Paper and Decorative Materials: Thorough saturation of paper with a spray will work. For best results, hang paper during spraying. Total immersion can be used but a test sample is advised.



Hazard Class

Safecoat FR-31 Fire Retardant Fabric Treatment is not subject to WHMIS Regulations, nor is it regulated by Transportation of Dangerous Goods.

Test Results

Safecoat FR-31 Fire Retardant Fabric Treatment is tested under **CAN/CGSB 4.2 27.1 MS**. The results show "a high degree of flame resistance" on fabrics such as:

- Polyester fabrics 100%
- Cotton 100%,
- Polyester/Cotton blend 65/35%,

Each of these fabrics is a medium weight (drapery/tablecloth) fabric.

Guarantee/Warranty

Recommendations for the use of our products are based on tests carried out at government approved labs. Manufacturer and seller are not responsible for results where the product is used under conditions beyond our control. Under no circumstances will Magna Coatings Technology Inc be liable for consequential damages or damages to anyone in excess of the purchase price of the product or services.