



Unsmoke[®] Unflame[™]

FOR PROFESSIONAL USE ONLY

Ready to use commercial grade fire retardant treatment

BACKGROUND

Un-Flame works by colloidal chemistry; it is an aqueous liquid in which fire retardant compounds have been suspended. If any material that has been treated with Un-Flame is ever exposed to fire, the treatment reduces oxidation. It does so by producing a thin layer of char which stops flame spread and prevents further combustion. Eventually the char extinguishes the fire.

Un-Flame performance has been documented by extensive testing including:

- NFPA-701
- Steiner A.S.T.M.-E 84-80 Tunnel Test
- F.A.A. Horizontal and Vertical Test

Un-Flame meets or exceeds all state, provincial and federal requirements of Life Safety Code NFPA and draperies in Nursing Homes, Hospitals, and Institutions. Meets standards of Pennsylvania, New York, etc.

WHERE TO USE

Un-Flame renders the following materials flameproof: Mattresses, draperies, pillows, curtains, upholstery, carpets, clothing, etc. composed of cotton, silk, canvas, linen, burlap, rayon, and cellulose.

PRETESTING

Un-Flame will not alter fabric if it is properly applied. Overuse, however, may result in a visible white residue. It will not adversely affect the appearance, hand (feel), or breathability of any material that has been properly treated. Un-Flame normally will not cause shrinkage or not alter the shade or light fastness of textile or paper dyes. Target materials should be tested in inconspicuous areas for adverse effects.

ITEMS NEEDED

- **Un-Flame**
- **Personal Protective Equipment (PPE)** as specified in the Material Safety Data Sheet (MSDS)
- **Supplies:** adequate supply of clean cloths and a plastic bag for the storage of soiled cloths, plastic drop cloths, pressure spray applicator

APPLICATION TECHNIQUES

- **Important note:** Un-Flame is sold as a ready to use product. It is NOT to be diluted before application.
- Horizontal surfaces in the treatment area should be protected from over-spray by plastic drop cloths.
- Un-Flame must penetrate and saturate materials to be effective. The heavier Un-Flame is applied, the greater the fire resistance

The two recommended application techniques are controlled spray and immersion:

When applying on location, **spraying** is the most common application method.

Immersion is more practical in several circumstances:

- In-plant application when using machinery that pulls fabric through a liquid bath and then squeezes out the excess product.
- When treating some textile materials such as nylon and polyester that don't hold much water
- For severe duty applications.

1. CONTROLLED SPRAY: Thoroughly but evenly saturate materials. It is important to apply the product as evenly as possible. If the product beads, or runs off, streaking can result. Streaking will require that the item be recleaned.

2. IMMERSION: Immerse materials, allow to drip dry or to tumble in dryer at lowest setting. Treated materials may be ironed on low or synthetic setting.

The application rate for medium density material is slightly over 500 square feet per gallon for Controlled Spray and slightly less than 500 square feet per gallon 49 square meters / 4 L.) for Immersion. Treated material becomes flame resistant when thoroughly dry after treatment.

FOLLOW-UP MAINTANANCE

WITHSTANDS CLEANING: Un-Flame protection is not removed by drycleaning; however, you must reapply Un-Flame after wet cleaning. This will ensure continued flame resistance.

CLEAN UP

- Check all PPE for damage. Repair or replace as needed.
- Clean the outside of the spraying equipment to remove soot and soils. This will help to prevent cross-contamination and will maintain your professional image on the next job.
- Flush the sprayer with detergent and then rinse with water to remove any product residue. Empty water from the sprayer, especially in cold climates where freezing is possible.
- Wash hands after using the product.

SAFETY CONSIDERATIONS

- Un-Flame has low toxicity. It is colorless and odorless, nevertheless, use professional discretion during treatment. Keep children and pets away from chemical products, equipment and the work area.
- Read the Material Safety Data Sheet (MSDS) for any chemical product before using it. You can obtain the MSDSs for ProRestore Products from your distributor or from *ProRestoreProducts.com*
- Be sure electrical equipment including plugs and extension cords are in good condition.
- Be sure to wipe any surfaces where there has been a spill of the product
- Wash hands after using the product.
- Be sure to use personal protective equipment. If there is damage in the building, this could include hard hats, heavy soled shoes, full protective suits or aprons. In every instance when spraying solutions overhead or in your breathing zone you should use eye protection, gloves and respiratory protection.

Where NOT to use:

- Avoid contact on surfaces that are damaged by water contact.

ADDITIONAL REFERENCES

- User Guides and Material Safety Data Sheets (MSDS) for all ProRestore Products are available at *ProRestoreProducts.com*
- Odor Removal Manual (order separately from your distributor) for comprehensive odor management techniques.
- Unsmoke / Microban Field Guide
- Restoration Sciences Academy Odor Certification Classes. For location and scheduling of classes, go to *ProRestoreProducts.com*.
- For technical support call 800-332-6037 (USA) or 800-233-6037 (Canada).
- For medical advice related to exposure to this product, call Infotrac at 800-535-5053 (USA and Canada) / 352-323-3500 (worldwide).

TECHNICAL DATA

Sold as	Case of four 1 gallon (3.8 L) bottles
Re-order number	342502000 case
Color	Colorless
Odor	Odorless
Appearance	Liquid
Flash point	> 200° F 93° C
Specific gravity	1.07
Density	8.8 Pounds per gallon
pH	6.4
Water Solubility	100%
Non volatile matter	17%
Storage	Store in a cool, dry location.