# SPECIFICATIONS & DIRECTIONS

## Thank you for choosing Master Flame!

To get the most out of your purchase, please carefully read the specification sheet in its entirety before applying.

#### **▶ INTRODUCTION**

Master Flame is an environmentally friendly Class "A" Flame Retardant intended for use on woods, fabrics, and other absorbent materials. When properly applied, Master Flame prevents dangerous flames from spreading and inhibits the development of toxic smoke. NOTE: Master Flame is *not* compatible with waterproof materials or polymer materials as Master Flame is not able to penetrate the cellular structure.

#### ► TECHNICAL INFORMATION

Master Flame Class 'A' Flame Retardant was tested in accordance with **NFPA 701**, **ASTM E84**, **and UL 723** for flame spread and smoke development value by SGS US, in addition to **California Title 19**. Based on the reported results and cited Code Classification System, Master Flame has been assigned a **Class "A" Rating**.

**FLAME RESISTANCE:** 30 mins with 1 application, 1 hour with 2 applications. Each application requires 24hr dry.

| TEST SPECIMEN           | MASTER FLAME | RATING CLASSIFICATION |
|-------------------------|--------------|-----------------------|
| Flame Spread Index      | 15           | 25 or less            |
| Smoke Development Value | 25           | 450 or less           |

# **SAFETY INFORMATION**

To ensure safe handling and application of Master Flame Class A Flame Retardant, please follow these safety guidelines:

#### Personal Protective Equipment (PPE):

Wear long sleeves and gloves while handling the product to avoid skin irritation.

Use goggles or other appropriate eye protection to prevent contact with the eyes.

**Ventilation:** Apply Master Flame only in well-ventilated areas.

Skin and Eye Contact: In case of accidental contact with skin or eyes, immediately rinse the affected area with water.

If irritation persists or adverse reactions occur, seek medical attention promptly.

#### COMPATIBILITY TEST

Before fully applying Master Flame, a small-scale test should be performed to evaluate materials for compatibility. Begin by applying Master Flame to a small sample of the desired material and let dry for 24 hrs. Once the sample is dry, carefully hold the material vertically, apply a small flame (butane lighter or match) to the treated portion for 10 seconds, and promptly remove the ignition source. If the flame extinguishes within two (2) seconds, you may proceed with the full application. *Heavy application may cause slight residue*.



#### **▶ APPLICATION DIRECTIONS**

Using a spray device, evenly distribute Master Flame on all sides of the item or surface being treated, let dry for 24hrs, and repeat as needed. For smaller items, you may fill a container with Master Flame and dip to soak. **NOTE:** Areas of heavy application may cause slight residue. Use a damp towel to remove from the surface.

**Before applying a second coat,** it is important to allow Master Flame to penetrate the item or surface and air-dry for 24hrs. Multiple applications may be necessary if you are spraying onto a vertical surface where drain-off is possible. If you are applying paint or sealer in addition to Master Flame, it is important to apply Master Flame first and allow 24-48 hours to cure before applying a water-based latex paint or sealer on top. For materials exposed to outdoor elements, a water-based sealer is required for best results. The use of oil-based sealers and paints will negatively impact Master Flame's effectiveness.

**When applying to wood products,** ensure the surface is unfinished and clean of debris. Master Flame will not work if applied on painted or sealed wood.

**When applying to fabrics,** ensure the item is clean of debris and has no impermeable characteristics. Items containing synthetics, nylons, or silk are incompatible with Master Flame.

**When applying to other absorbent materials,** verifying compatibility by performing a small sample test before full application is important. Please see "compatibility test" on page 1 for directions.

### "HOW MUCH MASTER FLAME DO I NEED?"

The approximate coverage varies by material thickness and density. For best results, it is recommended to treat all sides of material.

| QUANTITY       | APPROX. COVERAGE    |
|----------------|---------------------|
| Quart Sprayer  | Up to 100 Sq Ft.    |
| 1 Gallon       | Up to 500 Sq Ft.    |
| 4 Gallon Case  | Up to 2000 Sq Ft.   |
| 5 Gallon Pail  | Up to 2500 Sq Ft.   |
| 55 Gallon Drum | up to 27,500 Sq Ft. |

#### **▶ WHEN TO RE-APPLY**

**For unfinished woods** exposed to outdoor elements such as precipitation and humidity, it is recommended to reapply frequently, as moisture will negatively impact Master Flame's effectiveness. To prevent frequent reapplication, a water-based sealer can be applied to the wood after Master Flame has thoroughly dried.

**For indoor woods** not exposed to moisture, reapplication is recommended every 2 years.

**For fabrics that encounter high friction,** such as uniforms or upholstery, it is recommended to reapply every 6 months. For fabrics exposed to excessive moisture or after washing, Master Flame must be reapplied as Master Flame is water soluble. If dry cleaning your material, Master Flame must be reapplied after every other dry clean.

#### **WARRANTY INFORMATION**

Neither the seller nor manufacturer shall be liable for any injury, loss, or damage, direct or consequential, arising out of the use or the inability to use the product. Before using, the user shall determine the suitability of the product for their intended use, and the user assumes all risk and liability whatsoever in connection therewith. If the product is tamper-evident, do not use it and contact an authorized Master Flame dealer immediately.