



# **Full Defense™**

## **Fungicidal Protective Coating (40-25)**

### **Product Data Sheet**

#### **PROPERTIES**

**COLOR:**

White

**APPLICATION CONSISTENCY:**

Brush, spray, or roller

**AVERAGE WEIGHT/U.S. GALLON (ASTM D1475):**

11.4 lbs./gallon (1.37 kg/l)

**AVERAGE NON-VOLATILE (ASTM D2369):**

51% by weight (32% by volume)

**COVERAGE RANGE:**

Wet coverage rates shown below are minimum gallonages required (Subject to the nature of material being coated.):

Wood, Drywall, OSB 300 ft<sup>2</sup>/gal (0.14 l/m<sup>2</sup>)

**DRYING TIME (ASTM D1640):**

Set to Touch: 40 minutes at ambient

Dry Through: 2<sup>1</sup>/<sub>2</sub> hours at ambient

High humidity or low temperatures retard drying.

**SERVICE TEMPERATURE LIMITS (FSTM 70):**

(Temperature at coated surface)

-20°F to 180°F (-29°C to 82°C)

**WATER VAPOR PERMEANCE (ASTM F1249):**

Negligible effect on substrate drying rate.

> 42 perms at 4 mils dry film thickness. Tested at 100°F (38°C) and 90% RH.

**SAFETY:**

Wet Flammability (ASTM D92)

No flash to boiling, 210°F (99°C)

**SURFACE BURNING CHARACTERISTICS**

**(ASTM E84):**

Flame Spread: 5

Smoke Developed: 0

Tested at a coverage rate of 300 sq.ft./gallon (7.4 m<sup>2</sup>/l). Applied to inorganic reinforced cement board. The flame spread may vary at different product thicknesses and/or when applied over other surfaces.

#### **ATTRIBUTES**

**Foster® Full Defense™ Fungicidal Protective Coating (40-25)**

kills residual mold and mildew remaining after pre-cleaning contaminated surfaces and protects the surface of un-finished wood, drywall, oriented strand board, metal, masonry and other building materials from fungal growth.

**Full Defense** is a low odor, quick setting water-based coating specifically formulated for long-term fungicidal activity. It will inhibit the growth and spread of odor-causing bacteria, mold and mildew on its surface in residential, institutional and industrial buildings.

**Full Defense** provides a cost effective decorative finish. It can be used on walls, ceilings, pipes, wall cavities, crawl spaces, attics, basements and wherever effective mold controls are essential. It is specifically designed for field application to painted and un-painted wood, metal, masonry and concrete block and other building materials.

**Full Defense** meets requirements for LEED® EQ Credit 4.2, low-emitting materials: paints and coatings. VOC: 40 g/l, less water and exempt solvents.

Full Defense contains no asbestos, lead, mercury, or mercury compounds.

**LIMITATIONS:**

Store between 40°F (4°C) and 100°F (38°C). Protect from freezing.

Apply between 50°F (10°C) and 100°F (38°C) with less than 70% RH air conditions maintained until dry.

Avoid direct application onto pressurized PVC or CPVC piping and wipe off or remove overspray.

Water-based products may corrode carbon steel spray equipment. Corrosion resistant pumps and fittings are suggested.

**DO NOT DILUTE.**

**STIR WELL BEFORE USE.**

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# APPLICATION GUIDE FOR FOSTER® FULL DEFENSE™ (40-25)

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons.

**MATERIAL PREPARATION:** DO NOT THIN. Keep container closed when not in use.

**SURFACE PREPARATION:** Apply only to surfaces free of all loose dirt, grease, mold or other materials that may interfere with the adhesion of the coating to the substrate.

**Masonry, brick, plaster, and cement based surfaces:** On mold infested surfaces, aggressively scrape the surface, then wire brush to produce a firm, sound substrate. Clean the intended surface of any materials that may interfere with the adhesion of the coating and allow to dry completely before proceeding. Prime all unpainted brick, plaster and cement based surfaces with a masonry sealer or primer if dusty. A block-filler may be used to patch and smooth porous surfaces.

**Painted Surfaces:** Wire brush painted surfaces removing all flaking, loose, or chalking material. Sand all glossy surfaces (alkyl, oil, epoxy based coatings, etc.) to roughen entire area. Alternately a primer may be applied to glossy surfaces to improve adhesion; adequate adhesion must be confirmed prior to completing application. Clean the intended surface of any materials that may interfere with the adhesion of the coating and allow to dry completely before proceeding.

**Metal Surfaces:** Remove any dust, grease, oil or materials. Abrade all surfaces to remove all surface rust. Clean the intended surface of any materials that may interfere with the adhesion of the coating and allow to dry completely before proceeding. All rusted metal surfaces must be primed before application of Foster Full Defense. Foster Full Defense may be applied directly onto cleaned un-rusted galvanized surfaces.

**Unpainted Wood and Drywall:** Remove all dirt, grease, oil, loose mold or mildew or other materials. Remove all loose substrate materials, unnatural protrusions, splintered materials, etc. to a sound surface. In wall cavities or unexposed surfaces Foster Full Defense may be applied directly without the need for primer. On exposed surfaces where staining or discoloration of the coating would be objectionable prime with a stain blocking primer.

**HVAC Systems:** Follow use directions provided in the supplemental document "[Application of Full Defense Fungicidal Protective Coating, 40-25, in HVAC Systems](#)" available at [www.fosterproducts.com](http://www.fosterproducts.com). Always follow industry accepted cleaning procedures. Lined air ducts must be lightly vacuumed to remove all mold, dust and loose particles, being careful not to tear or loosen the liner. Galvanized surfaces need to be vacuumed or washed clean of all accumulated mold, dust and loose particles. Ensure that all interior surfaces are thoroughly dry before applying Foster® Full Defense. See metal surface preparations for primer requirements.

**APPLICATION:** Always ensure adequate ventilation. HVAC systems must be under negative air pressure during and after application to allow for exhausting of odors and rapid drying of the coating. Apply Foster Full Defense to all surfaces by brush or airless spray at the following wet coverage rates (rates are minimum required and are subject to the nature of the material being coated):

Galvanized Metal: 0.75 gal/100 sq. ft. (0.31 l/m<sup>2</sup>), New Duct Liner: 1.0 gal/100 sq. ft. (0.41 l/m<sup>2</sup>), Old Eroded Duct Liner: 1.5 gal/100 sq. ft. (0.61 l/m<sup>2</sup>), Wood, Drywall, OSB: 0.33 gal/100 sq. ft. (0.14 l/m<sup>2</sup>)

Unsealed, rough, or low-density surfaces may require more material to attain required surface sealing.

Brushing will require two heavy coats applied at 90° to each other. Under normal circumstances a spray application can be completed in one coat, but for extremely porous or irregular surfaces, a second coat may be required. Ensure that the finished surface is smooth and well sealed. For airless spray application use an electric 2800 psi minimum pump with a 0.015 – 0.025 fluid tip. Clean brushes and equipment with warm water before product dries.

**NOTE:** Continue to circulate fresh dry air throughout the area during the application and for as long after the application as is possible. Exhaust circulated air outside the building or occupied space. If air must be exhausted inside the building circulate air through an air scrubbing filtration system with odor absorbing medium such as a charcoal medium. This circulation and filtration helps to reduce the dry time of the coating and reduce latex type odors that could possibly migrate from the application area. Be sure exhausted air is odorless before venting into occupied spaces.

**MAINTENANCE:** Where accessible the coating may be washed down periodically to remove any accumulation of materials with water and a mild detergent. Normal cleaning procedures must be maintained in HVAC systems to remove accumulated airborne particles. If coating becomes damaged clean surface and re-apply coating.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Do not get on skin, clothing or in eyes. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. This product may cause skin sensitization reactions in some people. Remove contaminated clothing and wash clothing before reuse.

## USER SAFETY INSTRUCTIONS

Users must wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users must remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users must remove personnel protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible wash thoroughly. When applying this product user must wear long sleeve shirt, long pants, shoes plus socks, chemical-resistant gloves, and a chemical-resistant apron. When applying with a sprayer, applicator must wear a respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

**FIRST AID; IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a Poison Control Center or doctor for treatment advice. **IF ON SKIN:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for treatment advice. **IF SWALLOWED:** Call a Poison Control Center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not give anything to an unconscious person. Do not induce vomiting unless told by a Poison Control Center doctor.

## CUSTOMER SERVICE: 800-832-9002

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**For professional use. Keep out of reach of children.  
Consult Material Safety Data Sheet and container label for further information.**