

# PROJECT FIRE SAFETY, INC.

PO Box 667 Siler City, NC 27344

(919) 742-5055 fax (919) 663-2525

## Product Data Sheet for **FR - 1 Paint Additive™**

### DESCRIPTION:

FR-1 is a specially formulated to easily mix with standard water-based acrylic latex paint. It is designed to raise the ignition temperature of the paint to provide a Class A flame spread rating. The original color or other characteristics of the paint will not be affected by FR-1. Clear coatings can also be mixed with FR-1. Mixture will appear milky in the can but will dry clear.

### PHYSICAL CHARACTERISTICS:

pH: 8.1

Color: Creamy White

Solids: 64.2%

Density: 1.39

### USES:

Restaurants, hospitals, Schools, Nursing Homes, Nurseries, Dormitories, Group Homes and wherever the safety codes demand Class "A" or Class "B" surfaces.

### APPLICATION PROCEDURES:

1. SHAKE WELL BEFORE USING. Be sure that product is of an even consistency, free from lumps, etc.
2. Mix 8 (eight) ounces of product into each gallon of water-based acrylic latex paint. You may need to use a larger container for mixing.
3. Blend with a high speed hand drill and mixing blade attachment for three to five minutes until evenly blended
4. Thin mixture with one or two ounces of warm water if necessary.

### TESTS/APPROVALS:

Testing conducted at United States Testing company in accordance with ASTM-E-84 "Standard Method of Test for the Surface Burning Characteristics of Building Materials". Meets specifications of UL 723, NFPA 225 and UBC 42-1: Class A at 200 square feet per gallon on ½" gypsum, Class B at 80 square feet on Red Oak.

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**SHELF LIFE:**

Over 5 years. Agitate before use.

**CAUTIONS:**

While Project Fire Safety's FR-1 Paint Additive is considered non-toxic, **DO NOT TAKE INTERNALLY!** If this occurs, drink water or milk, do not induce vomiting. If product contact eyes, flush with water, In either case contact a physician.

**NON-WARRANTY:**

Project Fire Safety, Inc. will not assume any liability for improper use or misapplication of this product. Any claim will be limited to the purchase price of the product.

# MATERIAL SAFETY DATA SHEET

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PRODUCT NAME: FR-1 (MG-LQ)  
MANUFACTURER'S NAME: Project Fire Safety, Inc.  
ADDRESS: PO Box 14342, Research Triangle Park, NC 27709  
EMERGENCY NUMBER: 1-919-742-5055  
INFORMATION NUMBER: 1-800-468-2876

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## I. PRODUCT IDENTIFICATION

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### HMIS HAZARD RATINGS

Health Hazard 1\* Fire Hazard 1 Reactivity 1  
Based on the National Paint & Coatings Association HMIS Rating System

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### SARA/TITLE III HAZARD CATEGORIES (see section x)

Immediate (Acute) Health: NO	Reactive Hazard: NO
Delayed (Chronic) Health: YES	Sudden Release: NO
Fire Hazard: NO	

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Chemical Name: Bromine Chlorine Emulsion  
Synonymous/ Common Name: NA  
Chemical Formula: NA  
Dot Proper Shipping Name: NA  
Dot Hazard Class: NA  
Dot I.D. Number: NA  
Dot Hazardous Substance: NA

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## II. HEALTH HAZARD INFORMATION

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### EMERGENCY AND FIRST AID PROCEDURES

EYES: Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of entire eye surface. Seek Medical attention.  
SKIN: Wash contaminated areas with soap and water, remove contaminated clothing. Do not use solvents for cleaning. If irritation occurs seek medical attention.

## III. FIRE AND EXPLOSION DATA

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FLASH POINT: None Under 204 C  
Autoignition Temperature: NA  
Flammable Limits in air, % by Volume- Upper: Nonflammable Lower: Nonflammable

### EXTINGUISHING MEDIA:

Fires involving this product are unlikely, but should one occur, it may be controlled by carbon dioxide, dry chemical, foam or water fog.

### SPECIAL FIRE FIGHTING PROCEDURES:

Pressure-demand, self-contained breathing apparatus should be provided for fire fighters in buildings or confined areas where this product is stored. This product at high temperatures releases hydrogen chloride

gas. Storage containers exposed to fire should be cooled with water spray in order to prevent pressure build-up.

#### UNUSUAL FIRE AND EXPLOSION HAZARD:

This product is nonflammable and nonexplosive under normal conditions of use. Over-pressurization of containers will occur if exposed to excessive heat. This product flows freely when hot and should be treated as an oil when exposed to fire.

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### IV. SPECIAL PROTECTION

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#### VENTILATION REQUIREMENTS

No special ventilation required under normal use. Use local exhaust ventilation where the product is heated; or mist, spray, dust, or vapor may be generated.

#### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

##### RESPIRATORY:

Respiratory protection is not required under normal use. Use NIOSH/MSHA approved respiratory protection following manufacturer's recommendation where mist, spray, dust or vapor may be generated and where product is heated.

##### EYE:

Face shield and goggles or chemical goggles should be worn where mist, spray, dust or vapor may be generated and where product is heated.

##### GLOVES:

Impervious viton gloves should be worn.

##### OTHER CLOTHING AND EQUIPMENT:

Standard work clothing. Standard work shoes. Shoes that cannot be decontaminated should be discarded. Wash contaminated clothing with soap and water and dry before reuse. Shower and eyewash facilities should be accessible.

#### MONITORING EXPOSURE

##### BIOLOGICAL:

No applicable methods.

##### PERSONAL/AREA:

Procedures applicable to total dust or mist can measure exposure; the low vapor pressure minimizes loss during sampling. Use NIOSH Analytical Method No. 1003

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### V. PHYSICAL DATA

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Boiling Point: @ 760mmHG: 100 C

Melting Point: NA

Vapor Pressure: Similar to water

Specific Gravity (H<sub>2</sub>O-l) 1.35@25 C

Solubility in H<sub>2</sub>O % by Wt: 35%

Vapor Pressure: (air-l): NA

Appearance and Odor: White liquid with no distinct odor

pH: 8.3

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## VI. REACTIVITY DATA

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### CONDITIONS CONTRIBUTING TO INSTABILITY:

Elevated temperatures and strong alkalies will promote the decomposition of this product. The thermal decomposition is a time/ temperature relationship. At normal room temperatures, decomposition is virtually nil.

### INCOMPATIBILITY:

This product will deteriorate with subsequent darkening and eventual decomposition when exposed to elevated temperatures or strong alkalies. The percentage of iron or zinc in any form will catalyze deterioration.

*\* Exposed nail/screw heads should be primed with untreated paint*

### HAZARDOUS DECOMPOSITION PRODUCTS:

Under fire conditions, this product will decompose to give off hydrogen chloride gas and traces of fragmented short-chain hydrocarbons. Under these conditions, sufficient hydrogen chloride is given off to necessitate the use of self-contained breathing apparatus. Held at 175 C for 4 hours, this product will give off aq maximum of .5 weight percent hydrogen chloride.

The presence of iron or zinc in any form will catalyze the decomposition of this product with resulting greater release of hydrogen chloride. Your technical service representative will be pleased to assist you in evaluating any proposed use of this product.

### CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION:

Not known to polymerize.

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## VII. HANDLING AND STORAGE

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### HANDLING AND STORAGE PRECAUTIONS:

To prevent deterioration with subsequent discoloration and possible decomposition with liberation of hydrogen chloride gas, storage temperatures for this product should not exceed 66 C.