



**UNDERWRITERS LABORATORIES INC.**

333 PFINGSTEN ROAD · NORTHBROOK, ILLINOIS 60062

*an independent, not-for-profit organization testing for public safety*

File R11170

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**FOLLOW - UP SERVICE PROCEDURE**

(TYPE R)

**FIRE RETARDANT COATINGS  
(BMQX)**

Manufacturer: Flame Safe International  
5729 Hart St.  
Ft. Worth, TX 76112

\* Applicant: Flame Safe International  
5003 N. Freeway, Suite B  
Ft. Worth, TX 76106

Classified  
Company: Same as Applicant

This Procedure authorizes the above Manufacturer to use the Classification Marking of Underwriters Laboratories Inc. only on Classified products covered by this Procedure, in accordance with the Classification and Follow-Up Service Agreement.

The Prescribed Mark or Marking shall be used only at the above manufacturing location on such products which comply with this Procedure and any other applicable requirements.

The Procedure contains information for the use of the above named Manufacturer and the representatives of Underwriters Laboratories Inc. and is not to be used for any other purpose. It is lent to the Manufacturer with the understanding that it is not to be copied, either wholly or in part, and that it will be returned to Underwriters Laboratories Inc. upon request.

This PROCEDURE, and any subsequent revisions, is the property of UNDERWRITERS LABORATORIES INC., and is not transferable.

Reviewed by

*J. Lewis Lee*

UNDERWRITERS LABORATORIES INC.

S P E C I A L I N S T R U C T I O N S

\*FIELD REPRESENTATIVE:

GENERAL

\* At regular inspections, the Field Representative shall accomplish the following:

1. Observe the production (batch mixing) and verify compliance with the manufacturing process description and formulation.
2. Observe the plant personnel conduct the weight per gallon and percent solids on the coatings and verify compliance with Procedure specifications.
3. Review the manufacturer's production records, batch cards and quality control data covering the coating produced and Labeled with the UL Classification Marking since the last inspection.

SAMPLES FOR REGULAR INSPECTION

Five one gallon samples of each finished product.

\* SAMPLES FOR RESEARCH TRIANGLE PARK

\* Twice each year, select the following samples, mark with the appropriate identification, and forward to the Follow-Up Services Department at Research Triangle Park.

One pint of each coating.

TE/SW/tf

FLAME SAFE CHEMICAL CORPORATION

PROCEDURE IN CASE OF FAILURE

If the original sample fails any one test specification, one additional sample may be selected from each of five other gallons and subjected to test for the failing characteristic.

If the original sample fails more than one specification, or one of the five additional samples fails, the entire lot submitted for Labeling shall be rejected and labels removed. The manufacturer may then make a careful review of the entire lot and resubmit any portion for retest and relabeling.

WEIGHT PER GALLON

Samples

Sufficient material from each of five 1 gal containers of the finished product.

Apparatus

Scale accurate to 0.01 lb and a Cleveland weight per gallon cup.

Method

The weight per gallon of each sample shall be determined with a weight per gallon cup. The weight per gallon shall be taken as the average of the five determinations.

PERCENT SOLIDS

Samples

Sufficient material from each of five 1 gal containers of the finished product.

Apparatus

A scale or balance accurate to 0.1 g and an oven capable of 105°C.

Method

A weighed sample of the coating shall be heated at 105°C until constant weight is achieved, cooled and reweighed. (The percent solids shall be calculated from the weight of the original sample and the amount remaining after heating.) The percent solids shall be taken as the average of the five determinations.

CASUALTY AND CHEMICAL HAZARDS DEPARTMENT:

GENERAL

\* The following tests shall be conducted on samples of finished products received from the Field Representative and as directed by the Follow-Up Services Department:

1. Percent phosphorus (wet basis).
2. Qualitative infrared analysis.

TE/SW/tf

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## 2. Statement pertaining to the Classification:

SURFACE BURNING CHARACTERISTICS OF  
APPLIED COATING

<u>Surface</u>	<u>Douglas Fir</u>
Flame spread	20
Smoke developed	140
Number of preliminary coats	None
Rate per coat (ft <sup>2</sup> /gal)	-
Number of fire retardant coats	3
Rate per coat (ft <sup>2</sup> /gal)	360
Number of overcoats	None
Rate per coat (ft <sup>2</sup> /gal)	-
Flash point of liquid coating:	
Fire retardant coating - closed cup, no flash	

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## 2. Statement pertaining to the Classification:

SURFACE BURNING CHARACTERISTICS OF  
APPLIED COATING

<u>Surface</u>	<u>Douglas Fir</u>
Flame spread	35
Smoke developed	95
Number of preliminary coats	None
Rate per coat (ft <sup>2</sup> /gal)	-
Number of fire retardant coats	3
Rate per coat (ft <sup>2</sup> /gal)	330
Number of overcoats	None
Rate per coat (ft <sup>2</sup> /gal)	-
Flash point of liquid coating:	
Fire retardant coating - closed cup, no flash	

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