



# SafeCoat<sup>®</sup> Latex 747 Clear Fire Retardant Coating

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## PRODUCT DESCRIPTION

**SafeCoat 747 Latex Fire Retardant Coating** is a two component, water-based, intumescent fire retardant coating ideally suited for interior applications to decorative wood products where a Flame Spread Rating of 25 or less ("Class A" or Class 1) and low Smoke Development Ratings of less than 50 are required. It limits flame spread by expanding to many times the original dry film thickness when exposed to heat. This expanded material forms a char which insulates the substrate against heat, and reduces available oxygen to the surface, thus limiting flame spread to a "**Class A**" rating on Douglas Fir plywood, as tested under **CAN4-S0102-M88** standards in a single coat application sprayed at 170 ft<sup>2</sup>/USG when used in conjunction with **SafeCoat 725**. In conjunction with **SafeCoat 725**, **SafeCoat 747 Clear** dries to a clear satin finish.

## FEATURES

- applied by brush or airless sprayer, **SafeCoat 747 Clear Fire Retardant Coating** imparts a **Class A Flame Spread Rating** when used in conjunction with **SafeCoat 725 Sealer/Overcoat** on Douglas Fir Plywood.
- is **versatile** and **cost effective**, and can be applied as a mandatory upgrade to assist owners and property managers to meet the latest fire and building code requirements.
- may also be applied as a **voluntary upgrade** to lower fire risks and reduce insurance costs.
- **dries quickly** which greatly reduces the application time for this system.
- is both **attractive** and **labor saving**.
- equipment and tools are **easily cleaned** with warm soapy water.

## USES

- Use on interior wood substrates wherever a clear varnish finish is required.
- May be applied over stains.
- May be applied over decorative paint finishes.

## TECHNICAL DATA and PROPERTIES

<b>Appearance</b>	Clear to cloudy free flowing liquid
<b>Finish</b>	Satin, (when used in conjunction with <b>SafeCoat 725</b> )
<b>Specific Gravity</b>	10.5 lbs/US Gallon or 1.27 g/mL
<b>Solids by Weight</b>	65%
<b>Solids by Volume</b>	57%
<b>VOC</b>	108.7 g/l    0.91 lbs/USG
<b>Dry Time</b>	<b>Touch:</b> 1 to 3 hours (Note: During periods of high humidity (i.e.: above 70% R.H.) drying is inhibited. Avoid using during high humidity conditions). <b>Recoat:</b> 30 minutes to 1 hour <b>Full cure:</b> 48 hours
<b>Coverage</b>	170 ft <sup>2</sup> /USG or 4.20 m <sup>2</sup> /L
<b>Film Thickness</b>	<b>Wet:</b> 9.41 mils <b>Dry:</b> 5.36 mils
<b>Flash Point</b>	No Flash
<b>Storage Limits</b>	Store in cool dry location away from strong light. Keep from freezing (above 32° F 0°C). This product is very hygroscopic.
<b>Shelf Life</b>	9 months
<b>Packaging</b>	<b>Component A:</b> Available in 5 gallon pails and 1 gallon cans. (Short filled to allow for the addition of Component B). Drums available on request.  <b>Component B:</b> 750 ml (26 fl. oz.) for use with a 1 gallon can of Component A.  3.78 litres (1 US gallon) for use with a 5 gallon pail of Component A

## INSTRUCTIONS FOR USE

### Surface Preparation:

All surface preparation should be carried out in accordance with good painting practices. Remove all loose, peeling or powdery paint from the surface. All dirt, grease, oil, wax and other foreign material must be removed with a suitable cleaner and allowed to thoroughly dry. Repair all cracks, holes and surface imperfections. All smooth or glossy surfaces should be dulled with sandpaper. All wood surfaces must be sealed with **SafeCoat 725** first and allowed to dry thoroughly (1-2 hours) before application of **SafeCoat 747 Clear**.

### Mixing Component A and Component B:

Pour appropriate size container of Component B into the container of Component A. 750 ml (26 fl. oz.) into a 1 gallon can or 3.78 litres (1 US gallon) into a 18.9 litre (5 US gallon) pail. Containers of Component A have been short filled to allow for the addition of Component B. Stir well with a stir stick or a mechanical mixer until thoroughly mixed. Mixed material will remain liquid for at least 24 hours. The blended material is suitable for application as long as it remains liquid.

### Application:

**Brush:** Use as supplied. For large areas, an addition of approximately 5% **SafeCoat 747 Reducer** will help maintain a wet edge.

**Roller:** Not recommended. (contact manufacturer for further information)

**Spray:** Airless spray is the recommended method. Equipment should be capable of producing at least 1500 PSI. Tip size of 13 one-thousandths is most suitable. Use of **SafeCoat Clear Reducer** is recommended to improve flow and leveling. Conventional spray equipment is not recommended as the atomization air tends to produce micro-foam in the applied film. If the use of conventional equipment is desired, addition of 10 to 15% **SafeCoat Clear Reducer** can aid in the reduction of foam. *Always test spray equipment on a sample area prior to use.*

- Surface and ambient temperature must be at least 50° F during application and must remain so for at least 48 hours following.
- Application of two coats is normally required to achieve the necessary film build. Allow first coat to become tack free before applying second coat (approximately 30 minutes to 1 hour). The cured film is hygroscopic and **must** be covered with **SafeCoat 725**.
- Allow at least 24 hours dry time before an overcoat is applied. In humid weather, dry time to overcoat will be extended, so ensure **SafeCoat Clear Varnish** is completely dry before application of **SafeCoat 725**.

### Clean Up:

Use clean, warm, soapy water to clean equipment.

### Precautions:

Use only under well ventilated conditions. See MSDS for detailed precautions.

### Hazard Class:

**WHMIS** D.2A, D.1A.  
**TDG** Corrosive Liquid, N.O.S. (Phosphoric Acid/Methanol). Class 8, UN 3066, PG.III

## TEST RESULTS

Testing was conducted in accordance with **CAN4-S102-M88** "Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies" by Underwriters' Laboratories of Canada. Following is a summary of the results of this test.

Test	<sup>1</sup> FSR	<sup>2</sup> SDC
Douglas Fir Lumber, coated by: <sup>3</sup> <b>SafeCoat 725 Sealer/Overcoat</b> applied in one coat at a rate of 9.0 m <sup>2</sup> per liter. (Sealer)		
<b>SafeCoat 747 Clear</b> applied in one coat at 4.0 m <sup>2</sup> per liter.	20-25	30-45
<sup>3</sup> <b>SafeCoat 725 Sealer/Overcoat</b> applied in one coat at a rate of 7.3m <sup>2</sup> per liter. (Top Coat)		

<sup>1</sup>FSR - flame spread rating

<sup>2</sup>SDC - smoke developed classification

<sup>3</sup>**SafeCoat 725** is not a fire retardant. It is used to protect the substrate from color change, protect from moisture, provide scrubability and change the gloss of the **SafeCoat 747**.

**NOTE:** The flammability characteristics of different species of lumber vary. However, the practice of using Douglas Fir as a standard test substrate provides a basis for the comparison of various coatings.

## IDENTIFICATION and CERTIFICATION

Each container bears a label reading "**Underwriters Laboratories of Canada**" or "**Warnock Hersey Laboratories of Canada - Listed - Fire Retardant Coating**" and "**Class A Thermal Barrier**".

## GUARANTEE/WARRANTY

Recommendations for the use of our products are based on tests carried out at government approved labs. Manufacturer and seller are not responsible for results where the product is used under conditions beyond our control. Under no circumstances will Magna Coatings Technology Inc be liable for consequential damages to anyone in excess of the purchase price of the product or services.