

SafeCoat® Clear II

DESCRIPTION

SafeCoat® Clear II Fire Retardant Coating is a two-component, ultra-low VOC, clear intumescent coating designed for application to wood surfaces where a Flame Spread Rating of 25 or less (Class A) is required.

SafeCoat® Clear II limits the spread of flame by expanding and forming a char when exposed to heat. The expanded char insulates the wood from heat and reduces the oxygen available for combustion at the wood surface.

SafeCoat® Clear II is suitable for interior applications requiring a Flame Spread Index of 25 or less (Class A) when tested in accordance with the **ASTM E-84-09** and to the **CAN/ULC S-102-18**.

FEATURES

- Clear intumescent coating that exhibits excellent flame spread protection for interior wood substrates
- Cures to a semi-gloss to satin finish; **SafeCoat® M55 Matte Reducer** is available when lower gloss is desired
- Extremely durable – scratch, mar, and stain resistant
- High solids – ultra-low VOC formula aids in meeting LEED™ criteria
- Halogen Free



LISTED

- **MASTER PAINTERS INSTITUTE #62**

AVAILABILITY

SafeCoat® Clear II is packaged in 2-gallon kits
SafeCoat® M55 Reducer is packaged in quarts or gallons

STORAGE

Store in a cool and dry place for product integrity. Store in tightly sealed containers to protect from moisture and foreign materials.

PRODUCT SAFETY

An SDS is available from Quantum Chemical. Follow all safety and handling procedures when using this product.

PROPERTIES

	Part A	Part B
Appearance:	Cream color liquid	Clear liquid
Specific Gravity:	1.4175	0.91861
Viscosity:	1,000-4,000 cPs	10-50 cPs
% Solids by Weight:	97	46
% Solids by Volume:	95	41
VOC Level:	0.45 g/L	Zero
Shelf Life:	1 year	1 year
Mixed Properties		
Specific Gravity:	1.168	
Viscosity:	70 cPs	
Solids by Weight:	76%	
Solids by Volume:	68%	
Pot Life:	1 hour at 25°C	
Coverage:	200 sq. ft./gal (18.58 m ² /L)	
Film Thickness:	Wet: 8.0 mil (Dry: 5.5 mil)	
Dry Times:	Touch: 6 hours	
(can vary with temperature)	Tack Free: 24 hours	
	Full Cure: 7-10 days	
	Recoat: 6-72 hours	
Pencil Hardness:	2H	
(ASTM 3363)		

APPLICATION INSTRUCTIONS

Surface must be clean, dry, and free of contamination. Due to the variability of wood and environmental conditions, it is recommended to coat a small test area to ensure proper wet out, finish, and compatibility with sealer (if used). On vertical surfaces thinner coats are required to avoid sag when applied at 200 sq. ft./gallon.

Mixing: This is a two-component, 1:1 system. Separation of Part A is normal. Mix **Part A thoroughly** before use [drill mixer is recommended] ensuring no solids remain on the bottom or sides of the container. Add **one Part B** (Hardener) to **one Part A** (Resin) by volume, in a quantity that will be used within the pot-life. **M55 Reducer** can be mixed at 1:10 volume ratio (M55:mixed SafeCoat Clear II) for slight gloss reduction, up to a maximum of 1:2 (M-55:mixed SafeCoat Clear II). End-users will need to determine the reducer level required to achieve their desired finish.

Application: Spraying achieves the most uniform and high-quality finish. Gravity feed or pressure pot HVLP is preferred or airless with a minimum 12 thou tip. If spraying is not possible, a high quality epoxy brush or roller compatible for solvent-borne paints can be used.

Cleanup: Flush lines and equipment with isopropanol, lacquer thinner, or acetone as soon as equipment is no longer in use. Ensure all containers are kept tightly closed when possible.

TEST RESULTS

Class A Flame Spread and Smoke Developed Rating

Testing was completed by Intertek Testing Services NA LTD., a certified independent testing laboratory.

SafeCoat® Clear II was applied at a rate of 200 sq. ft. per gallon and exhibited the following Flame Spread Index (FSI) and Smoke Developed Index (SDI) tested in accordance with **ASTM E-84-09; Standard Test Method for Surface Burning Characteristics of Materials** and to the **CAN/ULC S-102-18; Standard Test Method for Surface Burning Characteristics of Materials**.

Sample	FSI	SDI
SafeCoat® Clear II applied at 200 sq. ft. per gallon on 3/8" Douglas Fir plywood tested to ASTM E-84-09	15	220
SafeCoat® Clear II applied at 200 sq. ft. per gallon on Douglas Fir Tongue and Groove and tested to CAN/ULC S-102-18	15	120

PRODUCT WARRANTY

Recommendations for the use of our products are based on tests carried out at an accredited third party laboratory. Manufacturer and seller are not responsible for results where the product is used under conditions beyond our control. The purchaser of this product must rely on his own judgement in determining suitability for his purpose, and in applying directions as to handling and use.

Quantum Chemical makes no warranty, expressed or implied, except that if this product proves on inspection to be defective, Quantum Chemical will replace such quantity of the product proven to be defective or refund the purchase price of defective product. Labour costs and other consequential damages are hereby excluded. No representative or purported agent of Quantum Chemical has the authority to change this warranty. The information contained herein is subject to change without notice. If in doubt, contact your Quantum Chemical Representative for current Technical Data Sheet (TDS).