

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



- **MASTER PAINTERS INSTITUTE #62**

AVAILABILITY

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

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	1.168	
Specific Gravity:	70 cPs	
Viscosity:	76%	
Solids by Weight:	68%	
Solids by Volume:	1 hour at 25°C	
Pot Life: Coverage:	200 sq. ft./gal (18.58 m2/L)	
Film Thickness:	Wet: 8.0 mil (Dry: 5.5 mil)	
Dry Times: (can vary with temperature)	Touch: 6 hours Tack Free: 24 hours Full Cure: 7-10 days Recoat: 6-72 hours	
Pencil Hardness: (ASTM 3363)	2H	

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.



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.

Mixing Ratio:



(Hardener)
(B)



(Resin)
(A)

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