



TECHNICAL DATA BULLETIN

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This product is covered by U.S. Patent 8304032 (method), U.S. Patent 8440013 (composition), and Canadian Patent 2,629,952.

Revision #: 002

Revised: 11/01/15

Product Code: 06-Line

Product Name: Exterior Grade UV Cure Coating

Description:

Exterior grade radiation cure coating designed for use over vinyl and other composite fenestration products.

- Product contains 100% solids thus emit no volatile organic compounds (VOC's) or hazardous air pollutants (HAPs).
- Exceptional film properties such as adhesion, color hold, gloss retention, resistance to mold, moisture, staining, and scratch are produced when properly applied and cured.
- Product is formulated to provide excellent solar reflectance and reduction in heat build.
- Heat generated from the UV lamps starts the air-dry curing reaction of coating in pocket (recessed) areas.

Application:

A wide range of application equipment can be used including conventional spray, electrostatic, HVLP, air-assist airless, airless, flow, roll, or vacuum coating.

- Substrate should be free of grease, oil, and other contaminants. See Technical Data Bulletin for Composite Coatings SP-12 Cleaner for specific cleaning instructions.
- Use heat to lower viscosity and gloss if needed.
- Recommended film thickness 1.0 – 1.3 wet.
- Cure schedule consists of Gallium followed by Mercury lamps. Minimum cure schedule is as follows:

Band	mJ/CM2	mW/CM2
UVA	700	1033
UVB	529	912
UVC	57	98
UVV	1760	3506

Liquid Coating Properties:

Property:	Result:
Gallon Weight (lbs/gallon)	9.0 - 12.0
Weight Solids	100%
Volume Solids	100%
Viscosity #4 Zahn @ 77°F	20"-25"
VOC as Supplied	0 lbs./gallon

Cured Film Properties

At 1.0 - 1.2 mils Dry Film Thickness over PVC

Test:	AAMA 615 or ASTM	Result:
Color	AAMA 6.1.2	DEcmc <.5
Specular Gloss	AAMA 6.2.2	As Required
Hardness	AAMA 6.3.2	3H
Adhesion, Dry	AAMA 6.4.2	No removal
Adhesion, Wet	AAMA 6.4.2	No removal
Boling Water	AAMA 6.4.2	No removal
Direct Impact	AAMA 6.5.2	No removal
Abrasion	AAMA 6.6.2	Pass
Muriatic Acid	AAMA 6.7.1.2	Pass
Mortar	AAMA 6.7.2.2	Pass
Nitric Acid	AAMA 6.7.3.2	Pass
Detergent	AAMA 6.7.4.2	Pass
Window Cleaner	AAMA 6.7.5.2	Pass
Humidity	AAMA 6.8.2	Pass
Weathering, QUV	ASTM G154	ΔE <3.0 Hunter
Chalking	4,000 hours	Pass
Gloss Retention	Cycle Test ¹	Pass
Erosion	AAMA 6.9.1.5.2	Pass
Cold Crack	AAMA 6.10.2	Pass
Oven Aging	AAMA 6.11.2	3H, 100% adhesion
Heat Build ²	6.12 Horizontal	48°F - 54°F
Solar Reflectance	ASTM C1549	46% - 86%

¹ Cycle test consists of 12 hours UVA using 340 bulbs at irradiance of .76 w/m² at 60°C, followed by 11:50 condensation, and 10 minutes cold water spray.

² Heat Build and Solar Reflectance are color specific.

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