



MACHINECOAT® Plus Exterior Acrylic Latex Finish

GENERAL DESCRIPTION

Machine Applied Coatings *Machinecoat* Plus Exterior Acrylic Latex Finish is designed as an air-dry or force-dry coating to be applied to new wood siding (rough-sawn or smooth cedar, redwood, pine, etc.) or specific brands of manufactured siding. *Machinecoat* Plus is designed for application by Professional Authorized Machine Applicators using approved machine application methods and equipment. *Machinecoat* Plus Exterior Acrylic Latex Finish can also be used for touch-up and trim application.

RECOMMENDED SUBSTRATES

Wood
Wood composites
Medium Density Overlay (MDO)
Medium Density Fiberboard (MDF)

GENERAL SURFACE PREPARATION

Proper surface preparation is essential. Surfaces must be free of dust, sawdust, moisture, oil, grease, mildew, and other contaminants. Substrates should be checked for moisture content. All wood to be coated must be below 19% moisture content. Priming "green" wood with a moisture content of greater than 19% will increase dry-time, inhibit adhesion, and promote extractive bleeding and blistering.

LIMITATIONS OF USE

For use by Professional Factory Finishers only. This product is designed for application only by professional, trained personnel using proper equipment under controlled conditions and are not intended for sale to the general public. Apply only when air, surface, and product temperatures are above 50°F (10°C) and at least 5°F (3°C) above the dew point.

Radiant Infra-Red heat or hot air convection ovens may be used to force dry this product. Care must be taken to avoid overheating so that blisters in the film do not form. If blistering occurs, premature failure of the finish may occur. Not recommended for touch-up in large areas.

A second application of lighter colors may be necessary for complete coverage on rough sawn wood.

These products are designed for wood based materials and should not be used over bare, untreated metal. All wood to be coated must be below 19% moisture content.

Some woods, such as redwood and cedar, contain natural water-soluble extractive tannins that tend to "bleed" or migrate to the surface. Application of light colors of *MachineCoat* to these tannin staining woods may require the use of a primer to retard extraction bleeding.

Protect product from freezing.

PACKAGING

5-Gallon (18.9 L)

PRODUCT INFORMATION

Intermix Bases:

UC80147	White Base
UC80148	Black Base
UC80149	Yellow Base
UC80150	Red Base
UC80151	Deep Green Base
UC80152	Deep Blue Base
UC80153	Magenta Base
UC80154	Bright Yellow Base
UC80155	Bright Red Base
UC80166	Blue Shade Red

Machinecoat Plus Intermix Bases can be used as is or blended together to make hundreds of colors. **Do not tint.**

Verified color match formulas may be accessed through the formula book portion of the computer color matching system. Custom color formulas may be achieved using the matching software in the computer color matching system. Color formulas are dispensed gravimetrically (by weight) using the dispense cell system into the appropriate size container.

PRODUCT DATA

PRODUCT TYPE:	Acrylic Latex
VOLUME SOLIDS*:	38% +/- 2%
WEIGHT SOLIDS*:	52% +/- 2%
VOC*:	< 0.8 lbs. /gal. (< 100 g/L)
WEIGHT/GALLON*:	10.6 lbs. /gal. (4.8 kg) +/- .2 lbs. (91 g)

*Product data calculated on UC80147.

COVERAGE: Approximate coverage on rough-sawn wood, 175 to 200 sq. ft. (16.3 to 18.6 sq. m.); on smooth wood: 200 to 225 sq. ft. (18.6 to 20.9 sq. m.); prepared wood or manufactured siding: 200 to 225 sq. ft. (18.6 to 20.9 sq. m.). Coverage does not include variation due to application methods, surface porosity, and/or mixing.

Theoretical Wet Film Thickness per Coat:** 5.0 mils
Required Dry Film Thickness per Coat: 1.9 mils minimum

**Additional wet film may be necessary in order to achieve the required dry film thickness.

Viscosity (Stormer @77°F): 63 – 70 Krebs***
***Manufacturing specification, working viscosity may vary.

DRYING TIME: A minimum of 8 hours at 70°F (19°C) and 50% humidity is recommended for air drying. Drying times listed may vary depending on temperature, humidity, color, and air movement. Under suitable conditions the product may be forced dried.

CLEANUP: Clean equipment with soap and water, high-pressure water jet, or steam cleaner

DISPOSAL: Dispose of contents and container in accordance with all local, regional, national and international regulations.

FLASH POINT: Over 200°F (93°C)

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APPLICATION INFORMATION

Mixing: Stir thoroughly before use. Mixing blades should be 1/3 the diameter of the paint vessel. The mixing blade should be at least 4 inches from the bottom of the vessel. The goal is to generate axial flow – or a rolling doughnut effect. Simple circular paint flow within a vessel will not generate a well-mixed product. Poor mixing can cause color change within a paint run as well as varying degrees of paint hiding and performance.

Application Equipment: *MachineCoat* Plus Exterior Finish is formulated to be applied by Authorized Machine Operators and should be applied using approved equipment under specific conditions. Contact your PPG Technical Service Manager for application guidelines and assistance.

Thinning: Thinning is not recommended.

General Application Requirements

Substrate and air temperature must be above 50°F. Paint temperature must be at least 60°F. Paint must be mixed thoroughly – see mixing instructions.

If possible, pre-heat substrate to 100°F – 140°F board surface temperature (BST) for up to 2.5 minutes. Apply 6-8 wet mils – depending on application equipment. Dry mils required 1.9 – 2.5.

*Wet mils applied must result in dry mils required.

**Theoretical Wet Film Thickness per Coat is 5.0 mils.

A one coat system may be applied in two passes by flood or brush coater, spray, or vacuum coater. Paint may be air dried or force cured by convection oven or convection oven with IR assist. (BST 120 – 140°F). Cool to less than 100°F before slip sheet and stacking.

Additional Specific Application Conditions

In all applications, the measurement of the wet mils applied may be affected by the application equipment. A minimum dry film build of 1.9 mils is required for a one coat warranty. A minimum of 3.8 mils is required for a two coat warranty. Temperature and humidity conditions require adjustments to be made to application parameters. These conditions are suggested guidelines, please contact your PPG Technical Service Department for additional assistance and to conduct a review and audit of specific line parameters. Additional wet film may be necessary in order to achieve the required dry film thickness.

Brush Coater

One Coat Application/One Pass: Apply 6-8 wet mils; flash a minimum of 30 seconds to 1 minute; oven setting of 145-200°F to achieve a BST of 120 – 140°F. Time in oven 4 to 8 minutes depending on oven temperature. Cool down 3 to 4 minutes to achieve a stacking temperature of less than 100°F.

One Coat Application/Two Passes: Apply 3.0 – 4.0 wet mils; flash a minimum of 30 seconds to 1 minute; oven setting of 145 – 200°F to achieve a BST of 120 – 140°F. Time in oven 2.5 to 3.5 minutes depending on oven temperature. Cool down 20 to 30 seconds; apply second pass of 3.0 – 4.0 wet mils; oven cure at 145 – 200°F for a minimum of 4 minutes to achieve a BST of 120 – 140°F. Cool down 3 to 4 minutes to achieve a stacking temperature of less than 100°F.

Two Coat Application: Apply 6-8 wet mils; flash a minimum of 30 seconds to 1 minute; oven setting of 145-200°F to achieve a BST of 120 – 140°F. Time in oven 4 to 8 minutes depending on oven temperature. The second coat may be applied immediately by a second inline coater or the boards may be brought around to the beginning of the line and run through again. Again, apply 6-8 wet mils; flash a minimum of 30 seconds to 1 minute; oven setting of 145-200°F to achieve a BST of 120 – 140°F. Time in oven 4 to 8 minutes depending on oven temperature. Cool down 3 to 4 minutes to achieve a stacking temperature of less than 100°F.

Spray Coater

Spray tip recommendation: .017 or .019 spray tips – evaluate spray pattern before coating to verify that fan width is appropriate and no fingering is visible.

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APPLICATION INFORMATION (continued)

Vacuum Coater

The vacuum pressure pulled will be dependent on the vacuum system is use. The operator will need to work with the PPG Technical Service Department to determine the appropriate settings.

One Coat Application/One Pass: Apply 6-8 wet mils; flash a minimum of 30 seconds to 1 minute; oven setting of 145-200°F to achieve a BST of 120 – 140°F. Time in oven 4 to 8 minutes depending on oven temperature. Cool down 3 to 4 minutes to achieve a stacking temperature of less than 100°F.

One Coat Application/Two Passes: Apply 3.0 – 4.0 wet mils; flash a minimum of 30 seconds to 1 minute; oven setting of 145 – 200°F to achieve a BST of 120 – 140°F. Time in oven 2.5 to 3.5 minutes depending on oven temperature. Cool down 20 to 30 seconds; apply second pass of 3.0 – 4.0 wet mils; oven cure at 145 – 200°F for a minimum of 4 minutes to achieve a BST of 120 –140°F. Cool down 3 to 4 minutes to achieve a stacking temperature of less than 100°F.

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PRECAUTIONS

DANGER! MAY CAUSE CANCER. MAY DAMAGE THE UNBORN CHILD. Sanding and grinding dusts may be harmful if inhaled. This product contains crystalline silica which can cause lung cancer or silicosis. The risk of cancer depends on the duration and level of exposure to dust from sanding surfaces or mist from spray applications. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Emits toxic fumes when heated. **Note: These warnings encompass the product series. Prior to use, read and follow product-specific SDS and label information. FIRST AID:** If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting. If in eyes, remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. If on skin, remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners. If inhaled, remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Keep out of the reach of children. For workplace use, an SDS is available by calling (412) 492-5555. EMERGENCY SPILL INFORMATION: (412) 434-4515 (U.S.).

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