

WP-20

WATERBORNE OIL-MODIFIED URETHANE FINISH

Technical Data Sheet

DESCRIPTION:

Waterborne oil-modified urethane (OMU) finish. Low VOC, fast dry coating that is self cross-linking upon application and during cure, providing a durable, solid and protective film on various hardwood flooring species.

ADVANTAGES:

- Superior abrasion resistance
- Superior film hardness
- Excellent gloss
- Excellent rubber burn resistance
- Excellent film build
- Fast drying
- Low odor
- VOC compliant in all states
- Single component; self cross-linking upon application

PACKAGING:

Product is available in 1 and 5 gallon containers.

COVERAGE:

550-575 sq. ft/ gal. Recoat window 3–18 hrs.

ASSOCIATED PRODUCTS:

- **WP-3** Acrylic Sealer
- **WP-17** Neutral cleaner
- **VALSPAR** Paints

RELATED EQUIPMENT:

NOTE: Do NOT use Steel Wool Pads during any preparation or application step. Steel fibers remain in the floor and will rust when coated.

- Single disc floor machine, low speed (150–200 rpm); 17- to 20-inch diameter #120 and #150 grit abrasive disc screens
- 24-inch push broom for sweeping and tacking
- Terry cloth towels for use as tack rag
- Putty knife or scraper
- K-100 E-Z way applicator and KV-4400 replacement pads

DIRECTIONS:

NOTICE: THIS PRODUCT IS DESIGNED TO BE USED AS IS; THEREFORE, THINNING OR REDUCING WITH SOLVENTS IS NOT RECOMMENDED.

Preparation

Apply WP-20 Waterborne Oil Modified Urethane only when AMBIENT TEMPERATURE is **between 65°F and 95°F** and HUMIDITY is **under 80%**. Substrate and product must be acclimated as well.

NOTE: Follow MFMA and NOFMA guidelines for acclimation time of wood prior to installation, sanding, and finishing.

GENERAL PROPERTIES:

		ASTM
Color	1–2	
Viscosity	60–70 cps	D1545
Weight/Gallon	8.5 ± 0.1	D1475
Solids	30 ± 1%	D1644
Freeze Thaw	5 cycles pass	D2243
VOC	<250 g/L	

MFMA TESTS:

Sanding	Pass
Hardness	Pass
Abrasion resistance	Pass
Flexibility	Pass
Coefficient of friction	Pass
Maintenance	Pass

CHEMICAL RESISTANCE:

Stain resistance	Pass
Alcohol resistance	Pass
Naphtha resistance	Pass
Cola resistance	Pass
Beer resistance	Pass
Perspiration resistance	Pass

Previously coated floors

A test patch is strongly recommended to determine adhesion compatibility over a previous water base, or unknown finish.

NOTE: Do not use WP-20 Waterborne Oil-Modified Urethane Finish over solvent-stained wood, unless the stain has already been sealed.

- 1) Remove any masking tape or gum with a putty knife. Clean the floor of dirt, dust mop treatments, etc with **WP-17 Neutral Cleaner**.
- 2) Allow the floor to dry thoroughly.
- 3) Screen the floors with #120 grit screens (250 sq. ft per side) until the gloss is removed.
- 4) Vacuum. Tack rag the floor using **Water**.
- 5) Proceed to **Finish Coats & Line Marking**.

Newly installed floors or sanded to bare wood

- 1) Screen the floor using #120 grit screens (250 sq. ft per side).
- 2) Vacuum, then tack rag the floor with **Water**.
- 3) Allow the floor to dry to a dull, glossless surface.
- 4) Proceed to **Seal Coat Application**.

Seal Coat Application

- 1) Using an EZ-way applicator, lambs wool applicator, or a foam pad, seal the bare wood with **WP-3 Acrylic Sealer**.
NOTE: Do NOT use WP-20 Waterborne Oil-Modified Urethane Finish to seal the floor. WP-20 is intended for use as a finish coat only.
- 2) Allow 3–4 hours dry with good ventilation for each coat.
- 3) Minimum of two coats of **WP-3 Acrylic Sealer** is recommended.
- 4) Remove raised grain with a #150 grit screen, then tack rag with **Water**.

Finish Coats & Line Markings

- 1) With an EZ way applicator, lambs wool applicator, or a foam pad, apply **WP-20 Waterborne Oil-Modified Urethane Finish** going with the grain. Do not puddle finish.
NOTE: Do NOT use String Mops to apply product. Mops apply unevenly and leave behind swirl marks.
- 2) Allow 3–18 hours dry before recoating.
NOTE: If cured over 24 hours, abrade floor with a #150 grit screen. Do not use #120 grit here.
NOTE: Do NOT topcoat WP-20 with an oil-based finish.
- 3) **Line Markings (OPTIONAL STEP):**
Apply line markings between the first and second coats of WP-20 Waterborne Oil-Modified Urethane Finish. **VALSPAR Gloss Enamel latex paints** recommended. Follow the directions on the paint label for application.
NOTE: Before using paint, every color (not just brands) should be tested for compatibility.
 - a) Lay out the court with masking tape as required and apply the paint.
 - b) Allow the lines to dry for a minimum of 6–8 hours.
 - c) Abrade the lines lightly with #150 grit screens.
- 4) Finish with 1 more coat of **WP-20 Waterborne Oil-Modified Urethane Finish**.
- 5) Eliminate excess or directed air movement by closing doors/windows and turning off vent fans and AC fans. Premature curing can occur, disrupting flow and leveling.

Clean-Up & Cure

- 1) Clean tools, equipment and work area with **water**.
- 2) Allow 24 hours cure before light traffic and 3–5 days before athletic activities.

Adequate ventilation is imperative during the curing process.
Dry times will vary based upon the ambient conditions.

MAINTENANCE:

- 1) Use **Water** for daily dust mopping of the floor.
- 2) Use **WP-17 Neutral Cleaner** for more stubborn dirt removal. See label for instructions.
- 3) Try to limit street shoe traffic as much as possible. Place walk off mats at all entrances to collect dirt and grit that otherwise would be tracked onto the floor. Clean mats often. Avoid dragging tables and chairs across the floor, which can cause excess damage to the floor.

TROUBLE SHOOTING:

Slow Dry:	Low curing temperatures; high humidity; lack of ventilation after application.
Streaks:	Product applied too thin.
Fisheyes:	A foreign material on the surface, like oil, grease, or silicone.
Bubbling:	Overworking the product with applicator: shaking the finish before applying; or, high temperatures during application.
Peeling:	Improper floor preparation.
Dirt Particles:	Applicator not “de-fuzzed” causing loose fibers in the film; or, room vents not sealed during the application.
Screen Marks:	Using too aggressive a screen between coats.
Hazy Film:	High humidity during drying.

CAUTION:

- 1) Avoid prolonged breathing of vapors or mist.
- 2) Open doors and windows to ensure fresh air entry during application and drying. If necessary wear respiratory equipment (NIOSH/ MSHA TC-23C or equivalent).
- 3) Avoid skin contact, eye contact, or clothes contamination.

FIRST AID:

- 1) Skin Contact: Wash with soap and water.
- 2) Eye Contact: Flush with water for 15 minutes and get medical attention.
- 3) If Swallowed: Do not induce vomiting. Get medical attention immediately.
- 4) If experience watering eyes, headaches, dizziness, nose or throat irritation; Increase the flow of fresh air, or leave the area.

NOTICE:

- 1) Long term over-exposure to solvents has been associated with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.
- 2) In case of spill, dilute with water and mop up with a damp towels or rags.

DISPOSAL:

All label warnings must be observed until the container has been commercially cleaned, reconditioned, or disposed of in accordance with local government regulations.

Refer to Material Safety Data Sheet
for further safety and handling information.
For Emergency Medical Information
call 1-888-345-5732

KEEP OUT OF REACH OF CHILDREN

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