

Nano Shield™

**NANO SHIELD™
ADVANCED FLOOR FINISH**

DESCRIPTION AND USES

Nano Shield™ Advanced Floor Finish is a water-based self-cross linking copolymer resin system, enhanced with nano particles of aluminum oxide, providing durable interior clear finish that is ideal for coating and protecting hardwood floors and other interior wood surfaces. Nano Shield Advanced Floor Finish flows and levels exceptionally well on any wood surface. Nano Shield Advanced Floor Finish dries clear and is non-yellowing which makes it ideal for maintaining the true natural color of wood.

Nano Shield Advanced Floor Finish is recommended for use on residential wood floors: kitchens, living rooms, bedrooms, family rooms and entryways. It is also recommended for use on commercial wood floors to include retail stores, shopping centers, offices, restaurants, churches, classrooms, hotels, etc.

Note: When immediate heavy use of floor is required, use of Nano Shield Hardener is recommended. Nano Shield Hardener will speed up the effective cure time from 10 days to 4 days.

FEATURES

- Catalyzed performance without the catalyst
- Nano-size Aluminum Oxide particles fused into the resin for maximum scuff and scratch resistance
- Excellent wear and chemical resistance
- Excellent flow and leveling
- Crystal clear water-based formula
- Available in gloss, semi-gloss, satin and matte sheens
- 275 VOC compliant nationwide

PRODUCTS

SKU	Description	Container Size
137233	Gloss	1-Gallon
137263	Semi-Gloss	1-Gallon
137243	Satin	1-Gallon
270066	Matte	1-Gallon

PRODUCT APPLICATION

Before using, read all directions and precautions carefully.

SURFACE PREPARATION

For best results, use at temperatures above 60°F (16°C) and 80°F (27°C). To ensure proper adhesion, surfaces must be clean, dry, free from old finish, wax, grease and dust. For best results, follow NWFA Approved Sanding procedures. Remove all sanding dust with a vacuum and wipe clean with a lint-free cloth lightly dampened with water. Allow to dry thoroughly.

WARNING: SANDING DUST CAN BE A SPONTANEOUS COMBUSTION HAZARD. ALWAYS DISPOSE OF COLLECTED SANDING DUST IMMEDIATELY.

PRODUCT APPLICATION (cont.)

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

STAINING SURFACE

Oil or water-based stains can be used prior to finish application, but a test sample is recommended to ensure compatibility. For best results, use Nano Shield Fast Dry Floor Stains. Sealers or topcoats can be used in only 2 hours after applying Nano Shield Fast Dry Floor Stain. Darker colors may require longer dry times. Dry times can vary due to temperature and humidity. When using any other oil-based stain, follow the manufacturer's instructions before applying Nano Shield Amber Emulsion directly over thoroughly dry stain. Always prepare a test sample to determine stain and finish compatibility and adhesion.

SEALING SURFACE

Use Nano Shield Floor Sealer to initially coat to penetrate the wood. Nano Shield Sealer will produce a clear, colorless finish on most woods. Parks PRO Finisher Universal Sealer is also acceptable to bring out the rich amber coloration of wood, giving a similar coloration to that of traditional oil finishes. Sealer must be completely dry, abraded and clean before applying finish. Parks PRO Finisher Universal Sealer does not require abrading. **Note:** A sealer is recommended under Nano Shield Advanced Floor **Matte** Finish.

RECOATING PREFINISHED WOOD

Caution must be taken when screening and recoating prefinished wood. Follow the prefinished floor manufacturer's instructions before recoating. Prepare a test sample to determine compatibility and adhesion. Recommend PreFin Cleaner and Nano Shield Advanced Floor Finish.

APPLICATION TIPS

Extinguish all flames and pilot lights, and turn off all stoves, heaters, electric motors and other sources of ignition during use until project is complete. Use only when air (ambient) temperature is between 60-80°F (16-27°C) and the relative humidity is below 85%. Lower temperatures and/or high humidity may cause slower dry times. Slower dry may also result from applications on redwood, cedar or woods with high oil content, or when applied over some stains. Use full strength. Do not thin. Stir thoroughly before and during use. To prevent bubbles in the finish, **DO NOT SHAKE**. Do not over-brush, and do not apply with a roller.

PRODUCT APPLICATION (cont.)**APPLICATION**

Rock container and stir thoroughly before use. Stir contents well and frequently during use. **DO NOT SHAKE.** Apply Nano Shield Advanced Floor Finish using an application pad or a T-bar pulling in a 'snow plow' fashion.

Note: The Nano Shield Matte Finish specifically requires a heavyweight T-bar. Apply in direction of wood grain in smooth, level strokes.

Apply coats evenly at a rate of approximately 400 square feet per gallon. Maintain a wet edge at all times. Allow the finish to dry for 2-3 hours (no longer tacky to the touch). Slower dry times may result from lower temperatures and/or high humidity. Movement of air in high humid conditions is recommended.

Abrade the surface with a rotary buffer using a maroon buffing pad with 180 grit abrasion strips after the first coat as dried. Abrading the surface with a 220 grit screen is also acceptable. After abrading the surface, vacuum and wipe clean with a lint-free cloth lightly dampened with water. Allow to dry thoroughly. Follow this procedure for any successive coats. Abrading between coats is not required for adhesion as long as the time between coats is less than 24 hours. However, abrading between coats produces the smoothest finish. Note: Abrading with a maroon pad alone is not sufficient for a mechanical bond.

PRODUCT APPLICATION (cont.)**APPLICATION WITH NANO SHIELD HARDENER**

Rock container before use. Pour the contents (8 ounces) of Nano Shield Hardener into one gallon of Nano Shield Advanced Floor Finish and thoroughly stir for 5 minutes. Be careful to avoid foaming. **DO NOT SHAKE.** To mix finish amounts of less than 1 gallon, use a 1:12 ratio by weight. **DO NOT** alter the recommended ratio of finish to hardener. Allow the activated finish to sit for 5 minutes before applying. The finish/hardener mixture must be used within 3 hours of activation. Pot life can be affected by ambient temperature. Follow **APPLICATION** (above section), but allow the finish to dry 1-2 hours instead of 2-3 hours. Reference the Nano Shield Hardener TDS for more details.

DRY TIMES

Dry and recoat times are based on 70°F and 50% relative humidity. Allow more time at cooler temperatures. Dries to touch in 1 hour and can be recoated in 2-3 hours. Allow the final coat to dry overnight before permitting light traffic or other use of surface. Allow 72 hours before normal wear. Optimal cure is reached in 10-14 days.

CLEAN UP

Clean tools and equipment with soap and water.

STORAGE

Store at room temperature. **KEEP FROM FREEZING.** Three year shelf life on unopened product.

TECHNICAL DATA**NANO SHIELD™ ADVANCED FLOOR FINISH****PHYSICAL PROPERTIES**

Physical Properties		ADVANCED FLOOR FINISH
Resin Type		Water-based Polyurethane
Pigment Type		Nano-sized Aluminum Oxide
Solvents		Glycol Ethers and Water
Weight	Per Gallon	8.7- 8.8 lbs.
	Per Liter	1.04- 1.05 kg
Solids	By Weight	30.5-31.4%
	By Volume	27.5-28.1%
Volatile Organic Compounds		<275 g/l (2.30 lbs./gal.)
Recommended Dry Film Thickness (DFT) per Coat		1.0 mil (25μ)
Wet Film to Achieve DFT (unthinned material)		4.0-mils (75μ)
Practical Coverage at Recommended DFT (assumes 15% material loss)		400 sq.ft./gal. (9.8 m ² /l) Varies with type and porosity of wood
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	Touch	1 hour
	Recoat	2-3 hours
	Light Traffic	24 hours
	Normal Wear	72 hours
Shelf Life		3 years (unopened)
Flash Point		>200°F (93°C)
Storage		Store at room temperature. KEEP FROM FREEZING.
Safety Information		For additional information, see SDS

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