VARATHANE®
WATER-BASED FLOOR POLYURETHANE

DESCRIPTION AND USES

Varathane® Water-based Floor Polyurethane is an acrylic polyurethane designed enhance the natural beauty of wood while providing excellent scratch and stain resistance. It is ideal for all interior stained, bare, or painted projects such as furniture, doors, cabinets, and trim. It has better durability than traditional wood finishes, is fast dry, and is self leveling.

PRODUCTS

Description	1-Gallon	5-Gallon*
Satin	230231	230221
Semi-Gloss	230131	230121
Gloss	230031	230021

*Available as special orders only

PRODUCT APPLICATION

SURFACE PREPARATION

Previously Finished Surfaces ï To ensure proper adhesion, surfaces must be clean, dry, and free of wax, grease, oil, shellac, lacquer, mildew, and polishes. Remove wax with a wax stripper, shellac with a paint stripper, and mildew with a solution of 10% household bleach and water. Old finishes in poor condition should be removed. Sand using 150-220 grit sandpaper to obtain a smooth surface. Do not use steel wool as rust may develop after the finish has been applied. Remove all sanding dust using a vacuum, tack cloth, or cloth dampened with mineral spirits. Unfinished Surfaces ï Sand using 150-220 grit sandpaper and remove all sanding dust using a vacuum, tack cloth, or rag dampened with mineral spirits. If a filler or putty is used, make sure it does not contain wax allow enough time for it to dry thoroughly. Stained or Painted Wood ï Follow the manufacturerôs directions for application of the stain or paint. Make certain the surface is thoroughly dry before applying Varathane® Water-based Floor Polyurethane. Refer to the manufacturerôs label for dry times. For best results, use Varathane® Premium Wood Stains. 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.

PRODUCT APPLICATION (cont.)

APPLICATION Varathane® Water-based Floor Polyurethane appears milky when wet but dries to a crystal clear finish. Do not apply in direct sunlight. Use in an area with adequate ventilation such as an open garage. Apply only when air (ambient) temperature is between 55-90°F (13-32°C) and relative humidity is below 85%. Be careful when applying over white or pastel paints or stains as discoloration may occur. 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, or apply with a roller.

Apply using a good quality synthetic bristle brush, foam brush, or applicator. Allow the finish to dry 2 hours before re-coating. Lower temperatures and/or higher humidity may cause slower dry times. Re-coat only when previous coats have dried clear and feel hard. The coating should no longer feel tacky to the touch. A powder should develop when lightly sanded. If any coat has dried more than 24 hours, lightly sand before applying another coat. A minimum of three coats is recommended. If wood grain raises, sand smooth before applying the final coat. Allow the finish to dry 24 hours before light use. Wait 3 days before subjecting the surface to normal usage.

CLEAN-UP

Clean application tools and equipment with soap and water.

Form: CS1372
Rev.: 090412

Varathane®

TECHNICAL DATA

VARATHANE® WATER-BASED FLOOR POLYURETHANE

PERFORMANCE CHARACTERISTICS

PENCIL HARDNESS

METHOD: ASTM D3363 RESULT: 3H

CHEMCIAL RESISTANCE KCMA

Rating 1-10 10= No defects

Vinegar	10
Lemon Juice	10
Grape Juice	10
Orange Juice	10
Ketchup	10
Coffee	10
Olive Oil	10
100 Proof Alcohol	7 stains and recovers
Mustard	7 slight stain
Spic and Span	10

HOFFMAN SCRATCH

METHOD: ASTM D2197 4.0 kilograms to rupture

IMPACT RESISTANCE (Direct/.Reverse) METHOD: ASTM D2794 RESULT: 120/90 in-lbs.

TABER ABRASION METHOD: ASTM D4060 - CS-17 wheel, 1000 g. load, 1000 cycles RESULT: 50 mg loss

GLOSS METHOD: ASTM D523 RESULT: 25/55/80

Varathane® SINCE 1936

TECHNICAL DATA

VARATHANE® WATER-BASED FLOOR POLYURETHANE

PHYSICAL PROPERTIES

		WATER-BASED FLOOR FINISH - SATIN	WATER-BASED FLOOR FINISH - SEMI-GLOSS	WATER-BASED FLOOR FINISH - GLOSS
Resin Type		Acrylic Urethane	Acrylic Urethane	Acrylic Urethane
Pigments		Aluminum Oxide, Silica	Aluminum Oxide, Silica	Aluminum Oxide
Solvents		Water, Glycol Ethers	Water, Glycol Ethers	Water, Glycol Ethers
Weight	**Per Gallon**	8.36 lbs.	8.38 lbs.	7.39 lbs.
	Per Liter	1.0 kg	1.0 kg	0.88 kg
Solids	**By Weight**	28.6%	28.2%	28.3%
	By Volume	27.9%	27.2%	27.2%
Volatile Organic Compounds		<275 g/l (<2.3 lbs./gal.)	<275 g/l (<2.3 lbs./gal.)	<275 g/l (<2.3 lbs./gal.)
Recommended Dry Film Thickness (DFT) per Coat		1.0-2.0 mils (25-50ε)	1.0-2.0 mils (25-50ε)	1.0-2.0 mils (25-50ε)
Wet Film to Achieve DFT (unthinned material)		3.5 mils (87.5ε)	3.5 mils (87.5ε)	3.5 mils (87.5ε)
Theoretical Coverage at 1 mil DFT (25µ)		447 sq.ft./gal. (11.0 m^2/l)	436 sq.ft./gal. (10.7 m^2/l)	436 sq.ft./gal. (10.7 m^2/l)
Practical Coverage at Recommended DFT (assumes 15% material loss)		190-380 sq.ft./gal. (4.6-9.3 m^2//l)	185-370 sq.ft./gal. (4.5-9.1 m^2//l)	185-370 sq.ft./gal. (4.5-9.1 m^2//l)
Dry Times at 77°F (25°C) and 50% Relative Humidity	**Touch**	1 hour	1 hour	1 hour
	Handle	2 hours	2 hours	2 hours
	Recoat	4 hours	4 hours	4 hours
Shelf Life		3 years	3 years	3 years
Safety Information	**Flash Point**	>212° F (100°C)	>212° F (100°C)	>212° F (100°C)
	Warning!	**For additional information, see MSDS.**		

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