



**VARATHANE®  
CRYSTAL CLEAR POLYURETHANE**

**DESCRIPTION AND USES**

Varathane® Crystal Clear Polyurethane is designed to provide excellent protection for all your wood projects. Varathane Crystal Clear Polyurethane is formulated to provide excellent protection from scratches and stains. It is ideal for interior projects such as interior stained, bare or painted wood surfaces, including furniture, doors, windows, cabinets and trim. It is crystal clear, odorless and provides for easy water clean-up. It is not recommended for linoleum, vinyl or glazed tiles and metal.

**PRODUCTS**

SKU	Description
200081	11.25 ounce Gloss Spray
200181	11.25 ounce Semi-Gloss Spray
200281	11.25 ounce Satin Spray
200031	1-Gallon Gloss
200131	1-Gallon Semi-Gloss
200231	1-Gallon Satin
200041H	1-Quart Gloss
200141H	1-Quart Semi-Gloss
200241H	1-Quart Satin
200061H	Half-Pint Gloss
200161H	Half-Pint Semi-Gloss
200261H	Half-Pint Satin

**PRODUCT APPLICATION**

**SURFACE PREPARATION**

**PREVIOUSLY FINISHED SURFACES** – 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 up to 10% household bleach and water. Old finishes in poor condition must be removed by sanding using 120-150 grit sandpaper. Sand to obtain a smooth surface. Do not use steel wool as rust may develop after the finish is applied. Remove all sanding dust using a vacuum or cloth dampened with mineral spirits.

**UNFINISHED SURFACE PREPARATION** - Sand smooth using 120–150 grit sandpaper and remove all sanding dust with a vacuum or cloth dampened with mineral spirits. If a filler or putty is used, make sure that it does not contain wax and allow enough time for it to dry thoroughly.

**STAINED OR PAINTED WOOD**

Follow manufacturer’s directions for application of stain or paint. Make certain the surface is thoroughly dry before applying Varathane Crystal Clear Polyurethane. For best results, use Varathane Premium Wood Stains.

**PRODUCT APPLICATION (cont.)**

**SURFACE PREPARATION (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 Hotline at 1-800-424-LEAD or log on to [www.epa.gov/lead](http://www.epa.gov/lead).

**APPLICATION**

Product appears milky when wet but dries to a crystal clear finish. Use adequate ventilation at all times. Do not apply in direct sunlight. Apply only when air (ambient) temperature is between 55-90°F (13-32°C) and the relative humidity is below 85%. Be careful when applying over white or pastel paints or stains as discoloration may occur. Test Crystal Clear in an inconspicuous area before beginning. Testing is important when applying over paints or stains as the appearance of these products may change slightly when a water-based finish is applied.

**Aerosol Application** – Shake the can vigorously before and during use. Use a drop cloth or newspapers to protect surrounding areas from spray mist. Apply light mist coats, holding can 10-12” from the surface and spray with a smooth sweeping motion to avoid runs and sags. Several light coats provides for a better finish than one heavy coat. Dries to the touch in 30 minutes. Allow the finish to dry for one hour before recoating. To ensure a smooth finish, sand lightly between coats using 220 grit sandpaper. For maximum durability, a minimum of 4 coats are recommended. When finished spraying, clear spray valve by turning can upside down and pushing spray button for 5 seconds. Clean up wet stain with mineral spirits or paint thinner.

**Brush Application** – Stir thoroughly before and during use. To prevent bubbles, **DO NOT SHAKE**. Apply using a good quality, synthetic bristle brush, foam brush, or applicator. Allow the finish to dry a minimum of 2 hours and then re-coat. Lower temperatures and/or higher humidity may cause slower dry times. Re-coat only when previous coats have dried clear and feel hard (no longer tacky to touch). A powder should develop when lightly sanded. If any coat has dried more than 24 hours, lightly sand before re-coating to avoid brush marks. A minimum of 3 coats are recommended. If grain raise occurs, sand smooth before final coat. Allow finish to dry 24 hours before light use. Wait 3 days before subjecting surface to normal usage. Clean application tools and equipment with soap and water. Dispose of properly.

**TECHNICAL DATA****VARATHANE® CRYSTAL CLEAR POLYURETHANE****PHYSICAL PROPERTIES**

Physical Properties		Aerosol	Brush Goods
Resin Type		Urethane Modified Acrylic	Acrylic Modified Urethane
Pigment Type		Microcrystalline Silica	Microcrystalline Silica
Solvents		Glycol Ethers, Water	Glycol Ethers, Water
MIR		0.6 Max	NA
Fill Weight		11.25 ounces	NA
Weight	Per Gallon	NA	8.5 lbs.
	Per Liter	NA	1.02 kg
Solids	By Weight	NA	27.4%
	By Volume	NA	25.7%
Volatile Organic Compounds		NA	<250 g/l (2.08 lbs./gal.)
Recommended Dry Film Thickness (DFT) Per Coat		1.0-1.5 mils (25-37.5µ)	1.0-1.5 mils (25-37.5µ)
Wet Film to Achieve DFT (unthinned material)		NA	4.0-6.0 mils (100-150µ)
Practical Coverage at Recommended DFT (assumes 15% material loss)		10-12 sq.ft./can (0.9-1.1 m <sup>2</sup> /can)	230-350 sq.ft./gal. (5.7-8.6 m <sup>2</sup> /l)
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	Touch	30 minutes	30 minutes
	Recoat	1 hour	2 hours
	Light Use	24 hours	24 hours
Shelf Life		3 years	3 year
Flash Point		-42°F (-41°C)	167°F (75°C)
Safety Information		For additional information, see SDS	

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