MINWAX® Technical Data Sheet MINWAX® HELMSMAN SPAR URETHANE

DESCRIPTION:

Helmsman Spar Urethane is a durable, clear urethane topcoat for maintaining outdoor wood. Its improved formula can be recoated in 25% less time and contains over 100% more UV blockers than the original Helmsman Spar Urethane. Helmsman® forms a protective barrier against rain and moisture; Its special oils allow the finish to expand and contract with the wood as seasons and temperatures change; The UV blockers reduce the sun's graying and fading effects. Helmsman is available in Satin, Semi-Gloss and High Gloss sheens. Aerosol spray application is available.

RECOMMENDED USE:

Designed for exterior use on stained or bare wood surfaces, but can also be used on interior wood surfaces. Excellent for doors, windows, interior or exterior wooden furniture, trim, bathroom cabinets, kitchen countertops and bar tops.

Helmsman Spar Urethane is not recommended for large, exterior surfaces where maintenance would be difficult, such as decks and siding. Slight ambering may be experienced when Helmsman Spar Urethane is applied over light colored stains or wood surfaces. Always spot test in an inconspicuous area to ensure satisfactory results.

Note: Helmsman is not recommended for use on floors. To protect floors, use Minwax® Super Fast-Drying Polyurethane for Floors or Minwax® Water Based Polyurethane for Floors.

SURFACE PREPARATION:

Surfaces must be dry and free from lacquer, shellac, paint, wax, grease, stearates, and polishes. Sand wood to obtain a smooth, uniform surface. Remove all dust with a cloth dampened with mineral spirits. Old finishes in poor condition must be removed.

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

APPLICATION NOTES:

- 1. If desired, apply stain, such as Minwax® Wood Finish™, to unfinished interior wood surfaces. Follow directions for application instructions and dry times.
- 2. Stir well before and occasionally during use.
- 3. Apply a thin coat of HELMSMAN® Spar Urethane using a high quality natural bristle brush. On unfinished wood, apply sufficient material to seal open joints, edges and end-grain.
- 4. Let dry at least 4 hours, then sand entire surface lightly with very fine sandpaper (220 grit) to ensure an even finish and proper adhesion of additional coats.
- 5. Apply second coat. If a third coat is desired, repeat Step 4 before applying. Note: For exterior surfaces or for previously unfinished wood, three coats are recommended.

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6. After final coat, allow 24 hours before normal use.

Read all label directions and cautions carefully before use.

Coverage: Approximately 125 sq. ft. per quart

DRY TIME:

At least 4 hours between coats and at least 24 hours before light use after final coat.

Note: Dry times are based on good ventilation, temperature of 77°F and 50% relative humidity. Lower temperature, higher humidity, lack of air movement or application of thick coats will extend drying times. Always test surface for tackiness between coats

MAINTENANCE:

Clean with Minwax Wood Cleaner, or gentle soap and water. When used for exterior applications, maintain by lightly sanding and adding an additional coat(s) as conditions require.

CLEANUP/STORAGE:

Use mineral spirits, paint thinner. Rags and other waste soaked with oil finished may ignite if improperly discarded. Place rags and waste immediately after use in a sealed, water filled, metal container. Dispose of in accordance with local fire regulations. Wash with soap and water before eating, drinking, smoking, or using toilet facilities. Do not store near hear, sparks, open flames or other source of ignition. Close container after each use. Store in original container. **KEEP OUT OF REACH OF CHILDREN.**

SAFETY:

WARNING! COMBUSTIBLE! VAPOR HARMFUL. IRRITATES EYES, SKIN AND RESPIRATORY TRACT.

CAUTIONS: Extinguishing Media and Fire Fighting Procedures: To extinguish fire, use carbon dioxide, dry chemical, alcohol foam and water fog. Use self-contained breathing apparatus with full-face piece operated in pressure demand mode. When burning, this product gives off toxic by-product such as carbon monoxide; therefore, the breathing of smoke and gases given off during burning should be avoided. Do not mix with strong oxidizing agents. Control Measures: If adequate ventilation cannot be maintained, use respiratory protection (NIOSH/MSHA TC23C or equivalent). Use rubber, neoprene or vinyl gloves and safely glasses or a face shield. Handling/Disposal: DANGER: KEEP OUT OF REACH OF CHILDREN. Combustible. Do not store near heat, sparks, open flames or other sources of ignition. Keep out of surface waters. Dispose of in accordance with local, state and federal regulations. FIRST AID: If swallowed: DO NOT induce vomiting. Call a physician immediately. If splashed on skin: Immediately wash with plenty of soap and water. If irritation persists, get medical attention. If affected by inhalation: Move to fresh air. If symptoms persist, get medical attention.

^{*}Read all label directions and cautions carefully before use*.

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PHYSICAL PROPERTIES:

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		Testing method:
Solvent:	Mineral spirits	
Odor:	Mild hydrocarbon	
Luster (@60):	Satin 20% - 30%	ASTM D 523-85 (60)
	Semi-Gloss 52% - 62%	ASTM D 523-85 (60)
	Clear Gloss 90% min.	ASTM D 523-85 (60)
No. of coats:	3 unfinished wood, 2 finished wood	
Dry-time:	Recoat: 6 hours; Final coat: 24 hours (light use)	ASTM D 1640-83
	(77 degrees F, 50%RH)	& Gardner Circular
Dry film thickness: Flash point: Applicator: VOC (max): Coverage (sq. ft./gal.):	1 mil/coat >101 Fahrenheit Brush 450 g/L 400	SETAFLASH* ASTM D 3960
% Solids:	50.9 +/50	ASTM D 2369-86
	180 - 290 cps	ASTM D 2196-86
		(Brookfield @ 77
		F, #2 spindle @
		50 RPM
Specific gravity:	.886902	ASTM D 1475-85

^{*}Closed cup; SETAFLASH is a registered trademark of Stanhope-Seta Limited.