



exceptional floor finishes

Synteko Floor Finishes
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TECHNICAL DATA SHEET

SYNTEKO BEST 1643, 1644, 1645

SYNTEKO Best finish is a two-component, non-ambering, extremely durable water based, low-odor hardwood floor finish for use in high traffic areas. SYNTEKO Best finish comes in 3 gloss levels: 1643 Matte 20, 1644 Semi-gloss 50, and 1645 Gloss 90. SYNTEKO Best finish gives maximum resistance to wear, scratching, scuffing, marring and common household chemicals. It is therefore ideal for surfaces subjected to unusually heavy wear. SYNTEKO Best finish can be used on untreated or previously finished surfaces.

FEATURES

- Exceptional hardness
- Exceptional flow & leveling
- Commercial & residential use
- Exceptional water & chemical resistance
- Non-ambering

BENEFITS

- Long term durability
- Ease of application
- One product for both applications
- Long lasting beauty & clarity
- Remains crystal clear

DIRECTIONS FOR USE

SYNTEKO® recommends using SYNTEKO Sealmaster sealer 1600 for the first coat on bare wood (see technical data sheet). SYNTEKO Best finish can be applied over the other product range of Synteko floor finishes once they are completely cured, but must not be covered with solvent based/oil based finishes. SYNTEKO Best finish should always be mixed with SYNTEKO Hardener 1648 (see mixing instructions below) before application.

PREPARATION OF UNFINISHED FLOORS OR FLOORS WHERE OLD FINISH MUST BE REMOVED

Sanding

Machine sand (following NOFMA, NWFA and MFMA guidelines) the surface to remove old finishes and impurities from the wood. The final sanding should take place with 120-150 grit sandpaper or a screen using the lowest possible drum pressure. If too much drum pressure is applied during the final sanding using the belt/drum sander, soft springwood may be compressed. When moisture from the SYNTEKO Sealmaster sealer 1600 affects such compressed soft springwood it would swell back to its original volume resulting in an obvious rise in the surface. Oily and resinous wood species such as teak must be sealed immediately, and within 2 hours after sanding. Thoroughly vacuum and dry tack before application. Do not forget to remove dust from baseboards, window sills, radiators, etc.

Sealing

Sealing is done with the waterborne SYNTEKO Sealmaster sealer 1600. During use, the sealer must be at room temperature. Further important factors are: Maintain an ambient temperature in the work area (air + floor) of 68°F – 77°F (20°C – 25°C). When sealing in normal climates, provide good ventilation. This accelerates drying, saves time and reduces grain raising. In hot, dry climates, reduce ventilation, if drying becomes too quick. Upon drying (usually within 1 to 1½ hours), lightly abrade SEALER Sealmaster sealer with a conditioning pad outfitted with 180 grit sandpaper strips. Further aspects regarding sealing are covered by the technical data sheet for SYNTEKO Sealmaster sealer 1600. Follow instructions given there. **Note:** Stained floors should not be sealed with SYNTEKO Sealmaster sealer but finished directly with SYNTEKO Best finish.

Mixing and pot-life

First mix SYNTEKO Best finish well before adding SYNTEKO Best Hardener 1648. Next add the complete contents of a bottle of Hardener 1648 to SYNTEKO Best finish. When smaller quantities are needed mix Hardener 1648 1:20 ratio (5%) to SYNTEKO Best finish. Shake the mixture vigorously for at least 1 minute. Immediately begin to thoroughly mix the Hardener/finish mixture upon adding the Hardener to the finish. Let the mixture stand for at least 5-10 minutes before use, allowing air bubbles to surface. The container must be kept open (loosely capped) after the addition and mixing of hardener. Finish mixed with hardener must be used within 4-5 hours.

Finishing

If staining is required, first use a stain that is specifically made for wood floors, follow manufacturer's instructions. Allow the stain to dry completely (High levels of humidity and/or cool temperatures will extend the drytime of stain). Next, after thoroughly vacuuming and tacking the floor with a water dampened towel or rag, as well as the surroundings, finishing with SYNTEKO Best finish may take place. During use, SYNTEKO Best finish must be at room temperature. Preferably, the temperature of the floor should be between 60 and 77°F (15 and 25°C). **The system for uncoated wood floors** is 1 coat SYNTEKO Sealmaster sealer followed by 2 coats SYNTEKO Best finish. In heavy wear areas a third coat of SYNTEKO Best finish may be applied. Work gently with the brush, light weight T-bar, pad applicator or roller, thus minimizing the amount of air mixed into the finish. Be careful in corners and other places where the finish may be applied in increased amounts. Always avoid direct sunlight on floor. This may heat the floor too much and result in the finish drying too quickly. Cover windows as needed to avoid these undesirable conditions. When using the applicator, use the "snow plow" method in a continuous, steady motion. Avoid direct drafts over the surface of the floor. Increase ventilation after SYNTEKO Best finish has "flashed off" and does not appear wet anymore.

Between coats of SYNTEKO Best finish allow at least 4-6 hours drying. However, do not apply more than two coats per day (sealer and/or finish) in order to allow the finish to dry and cure as soon as possible. Between coats of SYNTEKO Best finish buff/abrade with a maroon conditioning pad outfitted with 220-240 grit sandpaper strips. Vacuum thoroughly followed by wiping with a water dampened towel/rag. "Hot Coating" is allowed if the previous coat of SYNTEKO Best finish has been applied less than 24 hours before. **Note:** After completion of the application, allow the moisture to evaporate and the finish to cure at least one week before laying walk-off mats, area rugs or floor coverings.

RE-FINISHING OF PREVIOUSLY FINISHED FLOORS

To re-finish a previously finished floor, the surface must be completely free from grease, wax, polish, etc. If the surface has been treated with wax, all old finish must be removed by proper sanding to ensure good adhesion. Prior to coating the whole floor check first for good adhesion, clean and abrade a small area, next apply the finish. After drying and curing, the adhesion should be tested by scraping with the edge of a coin. If the finish layer loosens, the adhesion is poor and complete removal of all old surface layers is necessary. For all re-finishing, the rule is that the surface must be free from dirt, grease and other contamination. First, clean with SYNTEKO HEAVY DUTY SOAP and then wipe with a solution of 10% vinegar in 90% water. Upon drying abrade the floors finish thoroughly using a maroon conditioning pad outfitted with 180 grit abrasive strips until completely dull. Vacuum clean thoroughly followed by wiping with the water dampened towel/rag. Apply one or two coats of SYNTEKO Best finish. Do not apply more than one coat a day.

CARE AND MAINTENANCE

The finished floor may be walked on with caution 24 hours after the last coat is applied. Allow at least 3 days of drying/curing before heavy traffic and replacing furniture. Heavy furniture or rugs should not be placed or laid for at least one week. Make sure to install new protective felt pads on the bottom of furniture (chair legs, etc). Do not clean the floor with water or detergents during the first 2 weeks. Surfaces treated with SYNTEKO Best finish are easy to keep clean. Vacuum regularly and when necessary, damp mop with SYNTEKO SUPER CLEAN on a well-wrung cloth or SYNTEKO MICROFIBER MOP. Marks from rubber heels, shoe polish, lipstick, etc. should be removed immediately with SYNTEKO HEAVY DUTY SOAP or mineral spirits.

TECHNICAL DATA

Base Material:	Waterborne polyurethane dispersion	
Description & Color:	Milky white liquid	
Solids content:	Approximately 32%	ASTM D1644 method A
Density:	8.74 lbs/gallon	ASTM 1475
Viscosity:	Approximately 45 cps @23°C	ASTM D2196-86
pH:	Approximately 8.1	
Solvent:	Water	
Flash point:	> 100°C (212°F)	ASTM 3278-96
Hardener:	Poly-isocyanate cross-linker diluted in dipropylene glycol dimethyl ether	
Coverage:	350 to 650 sq.ft/gallon (depending on application method and porosity of the wood)	
Dry times:	60~90 minutes	
Hardness:	105 ~ 115 sec. (König pendulum)	ASTM D-4366-95 method A
Gloss levels:	Gloss: 90, semi gloss: 50, matte 20	
Abrasion resistance:	Excellent	ASTM D-4060-95
Resistance to chemicals:	Very good resistance to water and common household chemicals/cleaners	
Pot life:	Product should be applied within 4 to 5 hours after incorporation of hardener. Use all hardener within 24 hours after puncturing seal	
Storage life:	18 months in original package stored away from excessive heat/sunlight	
Storage conditions:	Protect from Freezing! Do not expose to temperatures below 5°C (+40°F) and above +30°C (+86°F)	
Clean Up:	Soap and water	

ENVIRONMENTAL DATA

SYNTEKO Best finish is water based and the VOC content is 323 grams/ltr. General safety precautions should be taken with handling any chemical product. Ensure good air circulation and ventilation during use. SYNTEKO Hardener 1648 is the hardener to be used with SYNTEKO Best finish (1643, 1644 & 1645). Always use caution when handling hardener. Avoid splashing. Wearing disposable polyethylene gloves and protective goggles is strongly recommended. **Keep out of reach of children.** Refer to MSDS sheet for further information.

DISCLAIMER

Our information is based on laboratory tests and is considered a guide in connection with choice of product and working method. As your working conditions are beyond our control, we do not assume any responsibility for the results. Our responsibility covers exclusively personal injury and damage to property, which actually have been proved subsequent to faults and defects in one of the products manufactured by us. Date: 06-09

