

TOTALBOAT HALCYON

- Available in 4 fine finishes
- Soap and water cleanup
- Low-odor, easy to apply
- Build multiple coats quickly —up to 5 per day
- Excellent UV protection

TotalBoat Halcyon is an extremely durable one-part, water-based marine varnish that dries to a UV-stable finish that accentuates the wood grain and improves clarity — even after multiple coats. Halcyon dries super-fast, so you can apply up to 5 coats in a day without sanding between coats. Low-odor, low-VOC formula cleans up with soap and water. Resealable, easy-pour pouch prevents messes and waste. Choose light amber gloss, clear gloss, clear satin or clear semi-gloss finish.

CLEANER/SURFACE PREPARATION SOLVENTS:

- Denatured alcohol (bare substrates only)
- Acetone (in contact with bare wood substrates only, specifically recommended for use on oily hardwoods or bare white oak substrates)
- Clean, fresh water (for cleaning sanding residue between coats only, not on bare substrates)

CLEANUP SOLVENTS:

- Water. Once cured/dried, Halcyon must be removed mechanically

THINNER/REDUCER SOLVENTS:

- Clean, fresh water (brushing, rolling, or spraying applications)

PRIMER/PRECOAT/SEALER: TotalBoat Wood Sealer (optional: for when a traditional oil-based varnish appearance is desired)

PAINT STRAINER: Fine or medium paint strainer

ACCEPTABLE SUBSTRATES: Bare wood, previously varnished wood in good condition, properly prepared epoxy, or previously painted surfaces

PERSONAL SAFETY:

Always use proper Personal Protective Equipment when handling or applying this product. Have good ventilation when using this product. Refer to the appropriate TotalBoat Halcyon Safety Data Sheet for more info.

SURFACE PREPARATION:

BARE WOOD:

- Wood should be in good condition, dry, and free of any dust, grease, oils, tar, wax, water, or other potential contaminants prior to sanding.
- The ideal wood moisture content to varnish is 6-8% or lower but less than 10% usually yields good results. Varnishing wood with a higher moisture content is not recommended.
- Sand the wood in the direction of the grain with 180- or 220-grit sandpaper until it is even and smooth.
- Vacuum away any sanding dust.
- Wipe the surface clean using a clean, lint-free cotton rag dampened with one of the specified cleaner/surface preparation solvents.
- Allow the surface to dry completely before applying Halcyon varnish.

PREVIOUSLY VARNISHED SURFACES:

- Previously varnished surfaces in poor condition should be stripped back to the bare substrates. Only apply Halcyon to varnished substrates in good, sound condition that do not show signs of delamination, cracking, or peeling.
- Wash the surface with a mild soap and water, and rinse thoroughly.
- Once dry, wipe the surface with one of the specified cleaner/surface preparation solvents using a clean, lint-free cotton rag.
- Allow any solvents to evaporate.
- Sand the surface in the direction of the grain with 220-grit or 320-grit sandpaper until it is smooth.
- Remove any sanding residue by wiping the surface clean using a clean, lint-free cotton rag wetted with one of the specified cleaner/surface preparation solvents.
- Allow the surface to dry completely before applying Halcyon varnish.

TEAK:

- Bare teak wood in good condition has a warm, golden tone. Teak that has been over-exposed to the elements may take on a gray appearance.
- If the teak wood has a gray appearance, it should be cleaned with TotalBoat Teak Cleaner to restore it to its original warm, golden color. Use Part A and Part B as specified on the instructions and allow a minimum of 48 hours dry time prior to applying Halcyon. Always ensure that the moisture content is within the acceptable range before applying varnish. Varnish or other coatings applied to damp wood may blister or delaminate from the wood if it has not had sufficient time to dry.
- Once the teak wood has been cleaned and thoroughly dried, follow the surface preparation instructions for BARE WOOD.

EPOXY SURFACES:

- Epoxy substrates need to be fully cured for at least 5-7 days prior to any surface preparation or application of varnish.
- Once cured, the epoxy must be washed with a mild soap and warm water, then rinsed well to remove any possible amine blush, whether noticeable or not. This must be performed even if the epoxy is classified as non-blushing or does not appear to have an amine blush on the surface.
- Dry the surface completely.
- Sand the surface with 220-grit or 320-grit sandpaper.
- Remove any sanding residue by wiping the surface clean with a clean, lint-free cotton rag wetted with one of the specified cleaner/surface preparation solvents.
- Allow the surface to dry completely before applying Halcyon.

PREVIOUSLY PAINTED SURFACES:

- Only apply Halcyon on previously painted surfaces that are in good condition and are compatible with Halcyon.
- Remove any dust, dirt, grease, oils, water, wax, or other potential surface contamination prior to sanding the surface.
- Sand the surface with 320-grit sandpaper.
- Remove any sanding residue by wiping the surface clean with a clean, lint-free cotton rag wetted with one of the specified cleaner/surface preparation solvents.
- Allow the surface to dry completely before applying Halcyon varnish.

APPLICATION CONDITIONS:

- Best results are achieved when the substrate, air, and varnish temperatures are between 50-90°F and the relative humidity is less than 85%.
- Do not attempt to apply Halcyon varnish when the air, substrate, or varnish are below 40°F or above 105°F.
- If possible, avoid applying or curing the material in direct sunlight to ensure adequate working time.
- Do not apply during times of high humidity, when dew, fog, or precipitation may affect the drying or cured finish of Halcyon.

APPLICATION:

VERY IMPORTANT – READ BEFORE VARNISHING!

- Shake and massage the Halcyon varnish Pour Pak prior to dispensing. It is extremely important to shake or massage for 3-5 minutes prior to dispensing Halcyon Satin, as the flattening agent may settle over time.
- Halcyon varnish can be applied thicker (4-6 mils wet film thickness) than most other traditional varnishes. It may even look cloudy on the surface when applied at a proper

wet film thickness. Any cloudy appearance will go away during the drying process.

- Applying the Halcyon too thin may require more coats to achieve a desired finish. Thinner coats may not fill sanding marks, and the resulting finish may also have a lower level of gloss than expected.
- Halcyon varnish can be reapplied without sanding for up to 12 hours.
- The minimum overcoat time for Halcyon varnish is 1 hour. The previous coat must be completely tack-free before reapplying. The actual dry time for each coat is dictated by how thick it was applied and the ambient temperature/relative humidity.
- A maximum of 5 coats can be applied per day under ideal ambient conditions.
- Do not attempt to sand Halcyon unless the most recent coat has dried for a minimum of 12 hours.
- If 2-5 coats have been applied in one day, it is strongly recommended to allow at least 48 hours drying time prior to sanding.
- Lightly scuff-sand with 320-grit sandpaper or a maroon abrasive pad. Always sand in the direction of the grain. Before reapplying, remove any sanding residue and wipe the surface with a clean, lint-free cotton rag dampened with fresh water before reapplying.

- IMPORTANT!** DO NOT use any solvents besides water in contact with Halcyon within 48 hours of the previous application. After 48 hours, denatured alcohol can be used.
- For best results and best finish quality, always sand prior to applying the final 1-2 coats.
 - Apply a minimum of 3-4 coats for interior applications, and 4-6 coats for exterior applications. Applying more coats will enhance the distinctness of image of the wood grain, while adding UV protection and durability.

CLEAR & AMBER GLOSS vs. SATIN & SEMI-GLOSS APPLICATION:

- Only use Halcyon Clear Gloss or Amber Gloss for build coats, regardless of the final desired finish.
- When a satin or semi-gloss finish is desired, apply the Halcyon Satin or Semi-Gloss as the final 1-2 coats.
- If the Satin or Semi-Gloss finish is applied directly to bare wood, it may create white or milky spots on the wood's surface.
- If Halcyon Satin or Semi-Gloss is used for build coats, the final finish may appear cloudy or hazy, lacking the desirable rich tones of the wood.
- Halcyon Clear and Halcyon Amber can be blended if desired to achieve a custom color tone.

TOTALBOAT HALCYON

- Halcyon Satin or Semi-Gloss can also be blended with either of the Halcyon Gloss finishes to achieve a custom finish.

FIRST COAT ON BARE WOOD (SEAL COAT):

- Unlike traditional varnishes, Halcyon does not require thinning for deeper penetration for the first coat on bare wood substrates.

WHEN A TRADITIONAL OIL-BASED SPAR VARNISH APPEARANCE IS DESIRED:

- TotalBoat Wood Sealer can also be used on new wood before applying Halcyon varnish to give the appearance of a traditional oil-based varnish.
- Simply apply 2-3 coats of Wood Sealer to bare, properly prepared wood as directed.
- Allow to dry for 48 hours, lightly scuff-sand with 320-grit sandpaper, remove any sanding residue, and apply Halcyon varnish as directed below.

APPLICATION METHODS:

BRUSHING or ROLLING INSTRUCTIONS:

- TotalBoat Halcyon should not need thinning for most brushing applications.
- Up to 20% water can be added to Halcyon to help with flow.
- Unlike traditional solvent-based varnishes, adding thinner (water) for the first coat is not necessary, as it will not improve penetration.
- Adding more than 10% water may lower the gloss, create drips or sagging on vertical surfaces, or extend the dry time.
- Only use high-quality paint brushes with tapered nylon, polyester, or nylon/polyester-blend bristles when applying Halcyon. Select a brush width and handle style that works best for the project.
- Foam brushes can be used but are not ideal because they tend to apply the varnish film too thin, requiring extra coats or reducing the gloss of the finish.
- 1/8" or 3/16" foam roller covers can be used, but nap or other hair-type roller covers may leave hair or fine particles behind.
- The roll and tip method (applying the varnish across the grain with a roller and immediately following with a brush in the direction of the wood grain) is also a very successful

application method to apply a very even coat across larger areas.

SPRAYING INSTRUCTIONS:

- For spray applications, Halcyon can be thinned with water up to a maximum of 20%, however, most spray applications require 0-10% reduction.
- Thin with the minimum amount of water possible to ensure the highest gloss finish, achieve proper wet film thickness without dripping or sagging, and promote the fastest dry times.
- The actual amount of thinning will depend on the equipment being used and on the environmental conditions. Other spray methods are perfectly acceptable but may need some adjustment to the equipment or tip size to achieve the desired application properties.
- Always follow the recoat instructions and times posted above.
- When spraying ensure that the gun is the proper distance away from the substrate and the spray equipment has been tested and adjusted for proper application before applying Halcyon to the main project.

SPRAY METHODS:

- **Airless Spray:** The pressure should be roughly 170 bar/2500 psi, with a .33-.41 mm (11-16 thousandths) tip size.
- **Pressure Pot:** The pressure should be 3.44-4.47 bar/50-65 psi (gun pressure), and 8-10 psi (pot pressure), while the tip size should be .89-1.4 mm (35-50 thousandths).
- **Siphon Cup:** The pressure should be roughly 3.44-4.47 bar/50-65 psi (gun pressure), with a 1.5-1.8 mm (60-70 thousandths) tip size.
- **HVLP:** 1.2-1.5mm tip, 8-10 psi tip pressure, 25-30 psi inlet pressure

YEARLY MAINTENANCE:

- TotalBoat Halcyon can be cleaned with an all-purpose boat soap, such as TotalBoat Boat Soap and water.
- For superior results, sand with 320-grit sandpaper and reapply 1-2 coats annually. This will maintain the finish and UV protection of Halcyon varnish.



TOTALBOAT HALCYON

PHYSICAL DATA:

Vehicle Type:	Water-Based Polyurethane
Components:	One
Units of Measure:	Pint, Quart, Gallon
Finishes Available:	Clear Gloss: >90% (60° at 24 hours) Amber Gloss: >90% (60° at 24 hours) Semi-Gloss: 45-55% (60° at 24 hours) Clear Satin: 11-15% (60° at 24 hours)
Solids by Volume:	23-27%
Solids by Weight:	24-28%
Flash Point:	Greater than 200°F
VOC Content:	Less than 60 g/L
UV Stable:	Yes — Gloss finishes are more resistant
Food Safe/Food Contact Safe:	No

APPLICATION DATA:

Application Method:	Brush, Roll, Spray
Application Film Thickness:	4-6 mils wet (1-1.5 mils dry)
Coverage (sq. ft./qt.):	80-100 @ 3 mils WFT
Number of Coats (Minimum):	3-4 coats (interior applications) 6-8 coats (exterior applications)
Application Temperature/RH:	45-105°F, 0-85% RH
Minimum Overcoat Time:	1 hour @ 72°F
Typical Wet Edge Time:	45-90 seconds
Cleanup:	Mild soap and water
Thinner/Reducer:	Water (0-20%)
Typical Thinning %:	Brush/Roll: 0-10%, Spray: 0-20%
Maximum Recoat Window:	Up to 12 Hours without sanding