HARBOR GUARD - TECHNICAL DATA SHEET

Harbor Guard for Teak & Wood Surfaces

IMPORTANT: Review the appropriate Technical Data Sheet for the intended substrate before applying Harbor Guard.

I. Product Description

Harbor Guard is a thin-film, single-component, clear sealer designed to protect marine assets from bird droppings, fish blood, squid ink, acids, salt, ice, diesel exhaust, graffiti, and other stains. It forms a covalent bond with most substrates, including teak as a final topcoat over urethane and varnish, and is UV-stable. Harbor Guard creates a new surface that prevents oxidation and simplifies cleaning.

Application Methods

- Gerber three-ply prefold birdseye cloth diaper
- Hand microfiber applicator pad
- Foam brush
- HVLP sprayer - professional use only

II. Recommended Uses

Teak cap rails, doors, counter trim and other wood coated with urethane or varnish. Harbor Guard can be slippery when wet on teak treads for decks. Use non-skid tape over walked-on surfaces for traction.

Note: Only apply to substrates listed on this Technical Data Sheet.

III. Product Characteristics

Property	Typical Value
Colour	Clear or slight amber (temperature and humidity-dependent)
Finish	Gloss
Vehicle type	Solvent base
Flash point	-9°C / 15°F (Penskey-Martens closed cup)
VOC	700 g/L (US <100 g/L)
Weight per litre	0.89 kg/L

Dry Time

Stage	Typical Time / Condition
Touch dry	2–4 hours at 50% RH; dependent on temperature, humidity, and surface temperature. Higher temperature and humidity accelerate drying.
Light foot traffic	6 hours
Heavy traffic	24 hours
Forklift traffic	24 hours minimum
Dry to recoat	24 hours (may vary with humidity)
Full chemical-resistance cure	7 days

Coverage

Coverage varies based on substrate porosity and texture. Typical coverage is 250–300 square feet per litre (approximately 23–28 m^2/L). We recommend 2 coats.

Testing Results

Staining Agent	Resistance	Cleaner Required
10% citric acid	12 hours	Dry cloth
Acetone	48+ hours	Dry cloth
Balsamic vinegar	12 hours	Dry cloth
Betadine	6 hours	Wet cloth
Brake fluid	48+ hours	Dry cloth
Coffee/tea	48+ hours	Dry cloth
Gasoline	48+ hours	Dry cloth
Permanent marker	48+ hours	Solvent
Red wine	48+ hours	Dry cloth
Spray paint	48+ hours	Solvent
Diesel exhaust	14+ days	Soap and water
Bird droppings	7+ days	Soap and water
Squid ink	7+ days	Soap and water

ASTM Testing Data

- Abrasion resistance (ASTM D4060): 1,000 g at 1,000 rotations – 7 mg
- Film hardness, pencil (ASTM D3363): 9H
- Adhesion on aluminium (ASTM D4541): 11,721 kPa
- Adhesion (ASTM D3359-97): 4

IV. Application Instructions

Working time: Approximately 2 minutes at the wet line at 70°F and 60–80% humidity. Harbor Guard is moisture-cured and should not be applied if rain or dew is expected within 4 hours.

Suggested Materials

- Harbor Guard
- Gloss meter
- Microfiber application pads
- Application tray
- Foam brushes
- Nitrile gloves and eye protection
- Isopropyl alcohol (IPA)
- Acetone (for tough stains)
- Distilled water
- Microfiber and general-purpose rags
- Small waste pail
- Surface-protection tray to prevent spills
- Green Harbor Guard tape
- White Scotch-Brite pad
- Heavy-duty degreaser (e.g., Atomic Degreaser by Benefect)

V. Surface Preparation

1. Newly Refinished Teak Cap Rails, Doors and Counter Trim

Harbor Guard bonds effectively to most urethane and varnish finishes commonly used on teak, such as Bristol Finish Traditional Amber Urethane, Awlgrip Awlwood J3809 primer, and J3890 gloss or matte finish. When applied over properly finished teak, Harbor Guard preserves the appearance and finish, extending the life of refinished wood for over five years and eliminating the need for annual sanding and refinishing.

Key Considerations

- Harbor Guard will not adhere to teak joint caulking. Apply Harbor Guard before caulking teak joints. If urethane sticks to a caulk joint, Harbor Guard can be applied directly over that teak caulk joint.
- Once the refinishing process is fully cured, clean the surface with soap and water.
- Use the manufacturer's recommended solvent to clean the surface without damaging the finish. Acetone or IPA is suitable for cleaning Bristol and Awlwood urethanes.

2. Existing Urethane and Varnished Teak Cap Rails, Doors and Counter Trim

Assess the condition of the existing finish. If there are imperfections or exposed teak, follow the manufacturer's guidelines to restore the finish before applying Harbor Guard.

3. Repairing Damage from Dropped Sinkers, Hooks, Rope Burns or Impacts

- Harbor Guard has billions of bonds per square millimetre and will not let water migrate under impacted areas.
- Sand the impacted area and as little surrounding area as possible.
- If damage reaches raw wood, repeat the urethane or varnish manufacturer's installation procedure to seal the exposed wood.
- Once several coats of urethane or varnish have sealed the exposed wood, recoat the entire damaged section with one finish coat and do not sand.
- Apply a final coat of Harbor Guard 24 hours after completing the repair process.

VI. Application Methods

1 First Application: Recommended 2 Coats

We recommend 2 coats on the first application. This gives you better protection. The lower the original gloss reading, the more oxidized the surface and the more porous that surface is. The better it will look after the 2nd coat. Wait 24 hours between coats. After several years it may be time to revitalize the surface and then one coat will likely be sufficient.

Application with Microfiber Pad

Preparation

- Pour Harbor Guard into a clean tray to approximately half full. Cover the tray during pauses; covered product may remain usable for up to one hour. Keep fresh product in the tray and do not allow it to run dry. Replace the tray and applicator if the product becomes cloudy or the pad begins to stiffen.
- Saturate the microfiber pad and wring it lightly to prevent dripping. Apply in straight, consistent strokes, horizontally or vertically according to surface orientation. Avoid swirling motions and maintain a continuous wet line until fully coated.

Applying Harbor Guard is a 2-person job.

- The applicator who is at a direct angle to the surface can often not see if holidays in the coating. The assistant should be standing on an angle to the light (can be either the sun or a spotlight) and tell the applicator is there are any drips or areas that were missed.

Microfiber Pad Application

- Saturate the microfiber pad and wring out excess product.
- Apply in straight, consistent strokes, avoiding swirling motions.

- Test a patch for static charge. If beading occurs, wipe with acetone and neutralise with a white Scotch-Brite pad. Re-clean with IPA or acetone and reapply, ensuring solvent compatibility with the finish manufacturer's Technical Data Sheet.
- Apply a single coat of Harbor Guard.

Application with Foam Brush

- Use the largest practical foam brush and apply Harbor Guard in a forward direction.
- Avoid overworking the product or creating swirling patterns.
- Perform a static-charge test and neutralise if necessary as described above.
- Apply one coat of Harbor Guard.
- A second coat may be applied after 24 hours. Clean with IPA and reapply, testing for static charge before coating the entire surface.
- If small bubbles appear during application, the surface may be too hot in direct sunlight, or the brush may be creating bubbles. Switch to a microfiber pad or apply in the early morning when sunlight is less intense.

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Large Job Considerations

- Divide large surfaces into small sections to avoid the product curing too quickly.
- If an applicator feels dry or begins pulling, stop and replace the product, tray and pad or brush.
- Harbor Guard can be sprayed over large areas with an HVLP sprayer as a professional application. Consult Harbor Guard customer service for assistance.

Correcting Application Errors

- If Harbor Guard is misapplied, including overlapping tacky wet lines or an unsatisfactory finish, remove it with acetone or isopropyl alcohol (IPA) and reapply. This must be completed within 10 minutes of initial application. If removal is no longer possible, wait 24 hours and follow the final surface-polishing procedure.
- If areas are missed because of glare or poor visibility, do not rework the surface after it begins to tack. Wait 24 hours, reapply to the missed areas and polish as necessary.

Final Surface Polish After Application

For professional applicators only. Polish Harbor Guard approximately 24 hours after application when a higher-gloss finish is required. Use only an ultrafine finishing polish, never a cutting compound. Suitable products include Marine Nano Shop Fusion SiO2 Primer Polish or 3M Perfect-It EX Ultrafine Machine Polish (06068) with blue foam pad (05708). Use minimal pressure to avoid polishing through the coating. A second coat may be applied over polished Harbor Guard after completing all cleaning steps.

Clean-Up

- Clean all tools and equipment with acetone immediately after use.
- Once dry, the coating is solvent resistant.

Coating Care and Maintenance

Clean normally with soap and water. For stubborn stains, use a mild detergent or degreaser. Neutral-pH cleaners and degreasers may be used without damaging the finish. Remove dock and fender scuffs with acetone and a microfiber rag.

VIII Storage Conditions and Shelf Life

- Store in a fridge if possible. Otherwise store in a cool, dry, temperature-controlled location. Do not store solvent-based products in warm areas, direct sunlight or sun-heated vehicles. Excess heat can darken the product and the tint may remain visible after application.
- Unopened shelf life: 12 months when properly stored.
- Shelf life after opening: 30 days.
- Maximum storage temperature: 22°C.

Ignition Sources

Before indoor application, turn off pilot lights and extinguish all open flames. Eliminate sparks and other ignition sources.

Respiratory Protection

Use OSHA-approved respiratory protection compliant with OSHA 29 CFR 1910.134 and ANSI Z88.2. Select the respirator and cartridges from the current Safety Data Sheet and the workplace exposure assessment.

Ventilation

Provide fresh air and effective exhaust ventilation in enclosed work areas. If vapour is inhaled, move the person to fresh air immediately and obtain medical assistance if symptoms or physical difficulty occur.

Skin Protection

Wear nitrile gloves and appropriate protective clothing. If skin contact occurs, wash thoroughly with soap and water.

Eye Protection

Wear chemical safety goggles or a splash shield. Do not wear contact lenses without proper eye protection. If coating contacts the eyes, flush immediately with water for at least 15 minutes and seek medical attention.

Ingestion

If accidentally swallowed, rinse the mouth thoroughly and seek immediate medical attention. Do not induce vomiting unless directed by medical personnel or the Safety Data Sheet.

Work in Enclosed Areas

When working in confined or enclosed spaces, provide an observer to monitor the applicator for signs of physical distress. Follow all applicable confined-space entry requirements. When working in confined or enclosed spaces, provide an observer to monitor the applicator for signs of physical distress. Follow all applicable confined-space entry requirements

Guarantee

We offer a 2-Year Guarantee against product failures. This guarantee covers product defects that result in coating failure, such as:

- Peeling or flaking of the coating.
- Premature loss of gloss or hydrophobic properties.
- Breakdown of the protective layer under normal environmental conditions.
  (See the full Guarantee Statement on our website)

After 2 years, some areas may need a recoat. Simply clean the surface with IPA and re-apply.

More Information: www.harborguard.com | UAE: +971 54 588 11 77 | USA: +1 281 566 2477

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