

TECHNICAL DATA SHEET

Document Code: TDS SN-1 HP (2008-04)
www.epaint.com 508-540-4412



ePaint SN-1 HP Antifouling Paint EPA Registration #64684-5

Overview:

ePaint SN-1 HP is a high performance antifouling coating designed for high speed and frequently used government and commercial vessels only. SN-1 HP incorporates advanced fluoro-polymer resin technology that results in a hard, mar-resistant, light-weight surface. Like all ePaints, SN-1 HP is copper-free and will not promote galvanic corrosion on metal surfaces. SN-1 HP prevents bio-fouling using ePaint's patented photoactive technology and Sea-Nine 211® biocide that does not persist in the environment.

Recommended Uses:

Marine and fresh water immersion service; for military, government and commercial vessels only with average operating speeds of greater than 30 knots; for drag reduction & fuel savings.

Climate:

Only apply ePaint SN-1 HP under good drying conditions when substrate and ambient air temperature are between 50°F and 90°F. Do not paint when substrate is wet from rain or dew, or when surfaces are less than 5°F (3°C) above the dew point and holding or when relative humidity is greater than 85%.

Surface Preparation:

Adhesion of any coating depends on proper surface preparation. Substrate shall be free of oil, dust, dirt, grease, and salt/chloride contamination before abrading. Cleanliness is the most important step to achieve a coating system that will perform and last. After abrading the surface, remove dust and debris.

Compatible Existing Painted Surfaces:

SN-1 HP is compatible over most existing antifouling paints and epoxy primers that are in good condition and intact. SN-1 HP is not compatible over non-stick release coatings, soft abrasives, or flaking paint. Thoroughly abrade paint with 80 grit paper to achieve a roughened surface. Visit www.epaint.com FAQ page for a detailed compatibility chart or contact an ePaint representative.

Fiberglass:

De-wax surface if necessary and thoroughly abrade gel-coat with 80 grit paper to create a roughened surface profile. Although not required, it is strongly recommended to first apply one coat of ePaint EP-Prime 2000 epoxy barrier coating (see TDS P2000).

Aluminum and Steel Surfaces:

Abrasive blast or mechanically abrade with 80 grit aluminum oxide paper to achieve a 1.5-2.5 mil (38-63 micron) anchor profile and immediately apply a full coat of ePaint EP-Prime 1000 corrosion inhibiting epoxy primer (see TDS P1000).

Mixing:

Power-shake ePaint SN-1 HP before applying. If power shaker is not available, mix thoroughly until a homogenous blend results.

Thinning:

Not generally required. If necessary for viscosity reduction, to slow solvent evaporation when applying at high temperatures, or to obtain a smoother finish, use ePaint EP-13 thinner. Do not thin SN-1 HP more than 10% by volume or beyond your state's compliant limit. Considerations: thinning will increase dry-to-recoat time, dilute active materials, and reduces DFT; if thinning, allow for additional dry time between coats.

Application:

ePaint SN-1 HP may be applied by traditional painting techniques. For roller application, use a high quality short nap roller, such as 3/8" or smaller. For brush application use a high quality brush.

Over EP-Prime 1000 Corrosion Inhibiting Epoxy Primer:

Apply a thin coat of SN-1 HP at 1-3 wet mils over the last coat of EP-Prime 1000 when the primer is tacky but there is no primer

transfer with finger pressure. Allow system to dry overnight before applying consecutive coats.

Over EP-Prime 2000 Barrier Epoxy Coating:

Apply a thin coat of SN-1 HP at 1-3 wet mils directly over the last pass of EP-Prime 2000 when the primer becomes soft but tack-free and allow to dry overnight before applying consecutive coats.

Number of Coats:

Apply two or three full coats and additional coat at the waterline (waterline down approximately 1.5 ft) and high wash areas. An extra coat at the waterline area is recommended because ePaint's are photoactive ablative paints and wear faster in areas exposed to intense sunlight.

Film Thickness:

SN-1 HP should be applied at 5-7 wet mils to obtain 3-4 dry mils per coat unless otherwise instructed (i.e. first coat of ZO HP over primer). The use of a wet film thickness gauge is recommended.

Dry Time:

A coat of ePaint SN-1 HP applied at 5-7 wet mils is ready for recoat at 12 hours at 70°F (21°C). Consecutive coats should be applied within 7 days to avoid extra surface preparation. Minimum dry-to-launch time is 24 hours at 70°F (21°C). Dry times lengthen at lower temperatures and shorten at higher temperatures. Coating should be fully cured before placing into service.

Repairs:

For small bare areas, such as under blocks, mechanically abrade with 80 grit aluminum oxide paper to achieve a 1.0-2.5 mil profile and feather out painted surface two inches around bare area and remove dust. Prime and paint prepared areas following product instructions.

Cleanup:

Immediately cleanup spray equipment and brushes with ePaint EP-13 thinner, xylene, or MEK. Dispose of any unused materials according to Federal, state and local laws.

Maintenance:

Although maintenance scrubbing is normally not required it is recommended to have the boat checked occasionally, more so for boats that sit idle for extended periods of time, to make sure it is clean and that no growth is occurring. If growth is detected, lightly scrub the bottom with a soft brush to remove any fouling.

Considerations:

- ePaint's are photoactive and wear fastest where sunlight is most intense, the waterline area, and why additional coats at the waterline coats are recommended.
- ePaint's are designed to be slightly translucent for photoactive effects to take place; as a result, more than one coat of SN-1 HP may be required to hide underlying paint of a sharp contrasting color. Care should be taken not to exceed the recommended wet film thickness per coat when applying.
- Service life is directly proportional to resulting dry film thickness.
- No antifouling paint can be effective under all conditions of exposure. Pollution and natural occurrences can adversely affect antifouling paint. Extreme air and water temperatures, silt, dirt, oil, poor water clarity, and low oxygen levels can ruin antifouling paint. *Visible sunlight and oxygenated water are required for ePaint antifouling and release coatings to work effectively.*

Safety:

See individual product label for safety and health data. MSDS is available for download online at www.epaint.com or a facsimile may be requested by calling ePaint at 508-540-4412.

DISCLAIMER: The performance of any marine paint or coating depends on many factors outside the control of ePaint Company, including surface preparation, proper application, and environmental conditions. Therefore, ePaint Company cannot guarantee this product's suitability for your particular purpose or application. Any recommendations of ePaint Company contained herein, covering use, utilization, chemical, or physical properties and other qualities of the products sold are believed to be reliable; however, ePaint Company makes no warranty or representation with respect thereto. IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND/OR MERCHANTABILITY ARE EXCEEDED, ePaint Company SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. By use or application of any ePaint Company product, the buyer agrees that the sole exclusive remedy, if any, is limited to the refund of the purchase price or replacement of the product at ePaint Company's option.

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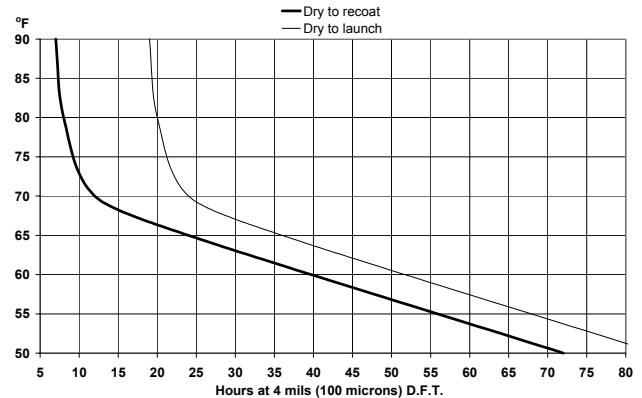
ePaint SN-1 HP
Antifouling Paint
EPA Registration #64684-5

Features	Recommended Uses
<ul style="list-style-type: none">• Hard ablative, mar-resistant finish with low surface energy• High performance antifouling featuring the Sea-Nine 211® booster biocide• Advanced fluoro-polymer technology• Compatible over most existing hard bottom systems, safe for all hull types• Contains no copper or tin compounds• Frequent hauling and launching should not affect coating performance• No maximum coat-to-launch time	<ul style="list-style-type: none">• For use on high performance military, government, and commercial craft• Vessels with average operating speeds of 30+ knots• Marine and fresh water service• For aluminum workboats• For drag reduction and fuel savings

Specification Data

Coating Type: Photoactive ablative matrix
Packaging: Single component material, available in 5 gallon, 1 gallon
Colors:
Black S1-305-HP
White S1-405-HP
Gray S1-705-HP
Orange S1-905-HP
Thinner: EP-13 Thinner
Application: Traditional painting techniques
Density (AVG): 14.5 lbs/gallon
Flash Point: 82°F (28°C) Setaflash
Solids By Volume: 56% ± 2%
VOC: <399 grams/liter
Shelf Life: 2 years from manufacture
Recommended Film Thickness per Coat: 5-7 mils wet to obtain 3-4 mils dry
Recommended Number of Coats: 2 or 3 full coats with additional coat around the water line (water-line down ~1.5 ft) and high wash areas

Dry-to-Recoat Time:



The above curve is intended only as a general guideline. Ventilation, film thickness, humidity, thinning and other factors can influence the rate of drying (ASTM 1640)

Theoretical Spreading Rate:

898 ft²/gal at 1 dry (2 wet) mil film thickness
299 ft²/gal at 3 dry (5 wet) mil film thickness
225 ft²/gal at 4 dry (7 wet) mil film thickness

Dry-to-Launch Time:

Minimum: 24 hours at 70°F (21°C), 50% R.H.
Maximum: Not critical

Safety: See individual product label for safety and health data. A Material Safety Data Sheet is available for download online at www.epaint.com or a facsimile may be requested by calling ePaint at 508-540-4412.

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