

BOATER'S GUIDE TO USING HULL PAINT IN CALIFORNIA

PAINT OPTIONS

Non-Biocide Paints

The most environmentally friendly approach

- Hull paints that *do not* contain metals (such as copper or zinc) or other active ingredients.
- Estimated average useful life²: 5-10 years
- Recommended cleaning: Every 2 to 4 weeks (frequency and method vary by product and season)
- Long term benefits include longer useful life (reduced haul outs). This may offset higher upfront application cost when compared to copper paints.
- **Use of non-biocide paints is encouraged statewide, especially in waters impacted by copper pollution.**

Paint Examples⁴

- International Paint Intersleek 900
- Interlux VC Performance Epoxy
- Ram Protective Coatings CeRam-Kote

Non-Copper Biocide Paints

- Hull paints containing zinc or other non-copper active ingredients (e.g., Econeal) to prevent marine growth on boat hulls.
- Estimated average useful life²: up to 2 years
- Recommended cleaning: Every 3 to 4 weeks (frequency and method vary by product and season)
- Non-copper biocide paints do not result in the release of copper. However, these paints release other active ingredients that may lead to future water quality impacts.

Paint Examples⁴

- Epaint Ecominder
- Interlux Interspeed 5640
- Pettit Hydrocoat Eco
- Sherwin Williams Seaguard HMF

Lower Leach Rate¹ Copper Paints

- Hull paints with leach rates at or below 9.5 $\mu\text{g}/\text{cm}^2/\text{day}$
- Estimated average useful life: 2-3 years
- Recommended cleaning: Wait a minimum of 90 days after applying new hull paint before initiating cleaning. Boaters are encouraged to clean these hull paints only when needed, no more frequently than once every 30 days.³
- **Use of lower leach rate copper paints is encouraged statewide, especially in waters impacted by copper pollution.**

Paint Examples⁴

- Nautical Super ProGuard
- Pettit Trinidad Pro
- Pettit Vivid Antifouling Marine Paint
- Seahawk Sharkskin

Higher Leach Rate¹ Copper Paints

Use of higher leach rate copper paints is discouraged statewide

- Hull paints with leach rates above 9.5 $\mu\text{g}/\text{cm}^2/\text{day}$
- Estimated average useful life: 2-3 years
- These paints may be discontinued in the future due to leaching concerns.
- Frequent and aggressive cleaning of higher leach rate copper paints is discouraged, as cleaning increases the release of copper into the water.

Paint Examples⁴

- Interlux Ultra
- Kop-Coat ZSpar The Protector VOC
- Sherwin Williams Pro-line 1088

¹California Department of Pesticide Regulation (DPR) has categorized registered copper paints into two categories (≤ 9.5 and > 9.5 $\mu\text{g}/\text{cm}^2/\text{day}$) based on their product-specific leach rates.

²Hull paint life expectancies based on paint manufacturers' claims.

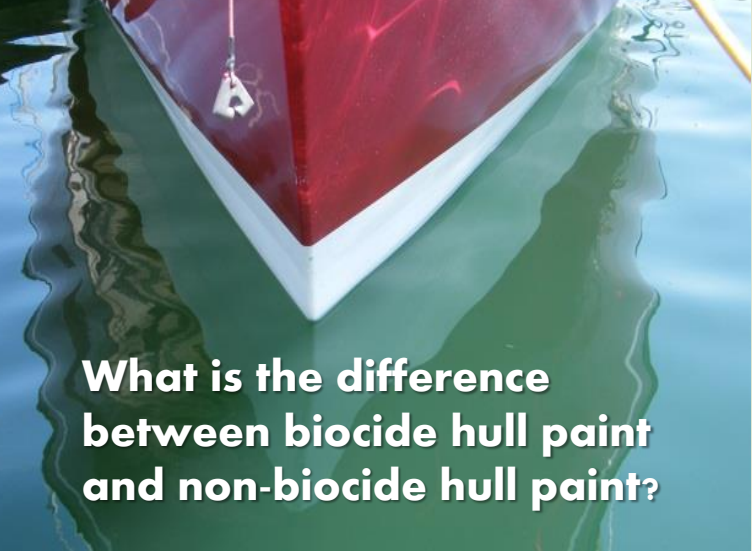
³Cleaning frequency recommendation based on use of soft-pile carpet for hull cleaning and Southern California fouling conditions.

⁴Paints are listed by manufacturer and paint name. Paint examples represent products known to be used by California boatyards.

The mention of trade names or commercial products here does not constitute endorsement or recommendation for use.

For a more complete list of available copper hull paints and more information on DPR's mitigation efforts, visit the website:
http://www.cdpr.ca.gov/docs/registration/reevaluation/chemicals/antifoulant_paints.htm

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What is the difference between biocide hull paint and non-biocide hull paint?

Biocide hull paints are toxic and act similarly to pesticides that prevent infestations of insects or weeds on your lawns.

Biocide paints contain copper or zinc or other active ingredients (e.g., Ecomea or Irgarol) to prevent fouling on boat hulls. However, biocide paints are also known to be toxic to marine organisms.

Non-biocide paints do not contain active ingredients, making them more environmentally friendly. These paints are typically made of silicone, ceramic or epoxy materials.

Marinas in Southern California impacted by copper pollution include Marina del Rey, Newport Bay, and Shelter Island Yacht Basin. For more information on the regulations and requirements in these areas, contact the local Regional Water Quality Control Board.



Marina del Rey

LOS ANGELES REGION (4)
http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/

Newport Bay

SANTA ANA REGION (8)
http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/tmdl_metals.shtml

Shelter Island Yacht Basin

SAN DIEGO REGION (9)
http://www.waterboards.ca.gov/sandiego/water_issues/programs/watershed/souwatershed.shtml#siybtmdl



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Are you looking to re-paint your boat hull?



Selecting a paint for your boat is far from a one-size-fits-all strategy. Key considerations include available hull paints, paint longevity, cleaning needs, and potential environmental concerns.

Copper is commonly used in hull paint to slow or stop the growth of marine life (fouling) on boat hulls by releasing copper (leaching). However, copper hull paints have been identified as the largest source of copper pollution in marinas.



Be a part of the solution! Use this guide to select a hull paint that eliminates (e.g., non-biocide paints) or reduces (lower leach rate copper paints) the release of copper into the local waters.



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