**Non-Biodeicide Paints**
- Hull paints that do not contain metals (such as copper or zinc) or other active ingredients.
- Estimated average useful life: 1-5-10 years.
- Boat use – Inactive, frequent use power boat, pleasure, racers, trailer (for hard paints only)
- Recommended cleaning: Every 2 to 4 weeks (frequency and method vary by product and local environmental conditions).
- Long term benefits include longer useful life (reduced haul outs). This may offset higher upfront application cost when compared to copper paints.
- These paints are encouraged statewide, especially in waters impacted by copper pollution.

**Non-Copper Biocide Paints**
- Hull paints containing zinc or other non-copper active ingredients (e.g., Econea) to prevent marine growth on boat hulls.
- Estimated average useful life: up to 2 years.
- Boat use – Cruiser, frequent use power, pleasure, trailer
- Recommended cleaning: Every 3 to 4 weeks (frequency and method vary by product and local environmental conditions).
- Non-copper biocide paints do not result in the release of copper. However, these paints release other active ingredients.

**Copper Paints**
- Hull paints using cuprous oxide (or other copper compounds) to impede growth of barnacles, algae, and marine fouling organisms.
- Estimated average useful life: 2-3 years.
- Boat use – Cruiser, frequent use power boat, pleasure
- Recommended cleaning: Wait a minimum of 90 days after applying new hull paint and follow label instructions and local requirements after.
- Boaters are encouraged to clean these hull paints only when needed, no more frequently than once every 30 days (methods vary by product and local environmental conditions).

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**Selecting a paint for your boat**

Selecting a paint is far from a one-size-fits-all strategy. Key considerations include:

- Boat type and use
- Paint longevity
- Application and long-term maintenance costs
- Cleaning expectations, in relation to the type of hull paint and how you use your boat

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**Before you clean**

The need for cleaning depends on how you use your boat. Paint manufacturers recommend copper hull paints not be cleaned if the boat is used frequently. However, refer to the hull paint—specific and local boatyard recommendations for your boat’s particular needs. Also check for local hull cleaning BMP requirements in your area.

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**How do you use your boat?**

- **Inactive** – Boats that do not move for long durations of time (six months or more).
- **Frequent–Use Power Boats** – Boats that are active for work related purposes or recreational/commercial activities (fishing, skiing, etc.).
- **Cruiser** – Boats used for long-range trips. Use may be periodic, but travel lasts for long periods of time and boat may enter foreign waters for extended trips.
- **Racer (Sail)** – Sailboats that are regularly used for racing purposes.
- **Pleasure** – Power and sail boats with varying use patterns, such as short-range travels such as sunset excursions or local pleasure trips.
- **Trailed** – Boats kept out of water on trailer or rack when not in use.

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1 Hull paint life expectancies based on paint manufacturers’ claims.
2 For more information on non-copper hull paints and assessment studies, visit https://beaches.lacounty.gov/alternative-hull-paints/
4 Copper hull paints with leach rates over 9.5 µg/cm²/day are not allowed to be sold for use on recreational boats in California after June 30, 2020.

To learn more about California Department of Pesticide Regulation (DPR)’s Determination of maximum allowable leach rate and mitigation recommendations for copper antifouling paints per AB 425 (DPR, 2014): https://www.cdpr.ca.gov/docs/lemon/surftrfcaps/2480_memo_cop_mitigation_ab425.pdf
Marinas in Southern California impacted by copper pollution include Marina del Rey, Newport Bay, and San Diego’s 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

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., Econea® or Irgarol) to prevent the growth of 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.

Be a part of the solution! Select a hull paint that helps reduce copper pollution in marinas.

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

Copper is commonly used in hull paint to slow or stop 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.

DID YOU KNOW?

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READ THE FINE PRINT

Paint labels contain information not only for application but also maintenance. Always follow the guidance provided on the label.

KNOW BEFORE YOU GO

The Department of Pesticide Regulation (DPR) developed recommendations for mitigating copper in marinas, including increasing boater awareness of non-copper hull paints.

You can research various options prior to getting your hull painted and inform the boatyard which type of paint (i.e. non-biocide, non-copper or copper biocide) you want to use on your boat. Visit https://beaches.lacounty.gov/alternative-hull-paints/ to learn more about your options.

This material was prepared by the Port of San Diego, in collaboration with the County of Los Angeles, Department of Beaches and Harbors, the California State Parks Division of Boating & Waterways, and the California Coastal Commission.

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