



Specifically Regulated Pesticides in Florida – Organotin Antifouling Paints¹

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Certain individual pesticides or groups of pesticides are specifically regulated by the Florida Department of Agriculture and Consumer Services (FDACS) under Chapter 5E-2, Florida Administrative Code – “Pesticides.” This guide will explain special regulations governing the use of organotin antifouling paints in Florida.

Organotins are used in a wide variety of industrial applications and typically used in ways that limit exposure of the organotin compound to the environment. Tributyltin (TBT) is an organotin compound that is an active ingredient in antifouling marine paint. The use of organotin compounds to prevent fouling marine organisms from building up on boat and ship hulls began evaluation in the 1950s. Antifouling marine paints commercially available for sale and use in Florida contain the active ingredient tributyltin methacrylate.

Antifouling paints release TBT, which prevents marine organisms from settling on the protected surface of boat hulls. The rates of release of TBT paint into the water depend upon both the formulation and the environment. Because TBT is toxic to nontarget aquatic organisms, the U.S. Environmental

Protection Agency, beginning in 1990, has required all stocks of organotin antifouling paints that are used in channels of trade to be labeled as restricted-use pesticides.

These organotin antifouling paints have raised environmental and regulatory concerns because of the previously mentioned factors and because of the patterns of use of these paints. In response, FDACS has taken a range of regulatory action in regards to both the use and sale of organotin antifouling paints. The following restrictions currently apply:

- Each application for registration of organotin antifouling paint products must be accompanied by documentation demonstrating that the products do not exceed the long-term average release rate of 4.0 $\mu\text{g}/\text{cm}^2/\text{day}$.
- Products exceeding the 4.0 $\mu\text{g}/\text{cm}^2/\text{day}$ rate -- or products for which complete release rate documentation has not been submitted -- will be denied registration. In the case of such products with existing registrations, the registration is subject to revocation.

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- Organotin end-use product registrations that include directions for use as home or commercial paint additives to produce antifouling paints were revoked in 1990 and are no longer accepted.
- The use of organotin antifouling paints registered in Florida is prohibited from use on vessels less than 82 feet (25 meters) in deck length unless the vessels are aluminum.
- All stocks of organotin antifouling paints in Florida channels of trade must be labeled as restricted-use pesticides.
- Organotin antifouling paints in aerosol cans of 16 ounces avoirdupois weight or less with directions for outboard motor or lower unit use only are exempt from classification and labeling as restricted-use pesticides.
- Beginning in 1990, organotin antifouling paints classified as restricted-use pesticides may only be used by licensed applicators or persons working under the supervision of a licensed applicator. The applicator's certification and license must be in the category "Organotin Antifouling Paint Pest Control."

Penalties

The use, sale, distribution, or application of organotin antifouling paints by any manner inconsistent with the provisions set forth by FDACS is in violation and subject to penalties. As with any pesticide, be sure to read and follow all label directions; the label is the law.

Additional Information

FDACS Bureau of Compliance Monitoring
<http://www.flaes.org/complimonitoring/index.html>
 (accessed April, 2009).

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