

# Antifoulings

## The Legislative Position By Country

October 2008 Update

### CANADA

All antifoulings applied in Canada require registration with the Government (Health Canada)

#### Restrictions

Application of antifoulings containing TBT completely banned under Canadian law.

All registered antifoulings containing copper must have a release rate of less than 40µg copper/cm<sup>2</sup>/day

### USA

All antifoulings applied in the USA require registration both Federally with the Environmental Protection Agency (US EPA) and with each state authority

Use of copper in antifoulings under review by EPA as part of re-registration eligibility decision (RED) process. Review should be complete in 2015

US Department of State and EPA also reviewing environmental inputs of copper from antifoulings used on US Government vessels. Decision (under UNDS regulations) expected in 2008 / 9 which will set maximum copper leaching rate for antifouling products used.

Concern exists over the amount of copper in waters of Californian harbors and marinas. Antifouling paints have been identified as major source of copper in these areas. In some local areas (eg Shelter Island Marina, San Diego) long-term timescales have been set for a 76% reduction of copper.

#### Restrictions

US-EPA Registrations of all TBT antifoulings have been cancelled

Antifouling paints applied in large shipyards in USA subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP) rules, ie. antifouling paints must contain less than 400g VOHAP / L paint

In California certain air quality districts impose maximum levels of Volatile Organic Compounds (VOC) that can be used in antifoulings used on pleasure craft

### EUROPEAN UNION COUNTRIES

Antifoulings applied in EU member states must be notified or authorised for use. Products requiring sale in UK, Sweden, Malta, Netherlands, Eire, Belgium, Finland and Austria must be registered under national pesticide laws before supply can begin.

The EU Biocidal Products Directive (98/8/EC) is now active and a review of all antifouling biocides submitted for approval has begun. Decisions on acceptability of these biocides is not expected before 2010 at the earliest. If a biocide is deemed "acceptable" under the BPD, EU member states will then re-review antifouling products containing them that exist on the market. If acceptable a product registration will be issued allowing sale and application of the product. Products deemed 'unacceptable' will be removed from the EU market. In the interim period before all products on the market are reviewed, the directive requires manufactures of antifouling paints to notify details of antifouling products on the market in each EU country.

#### Restrictions

Application of TBT anti-foulings to all vessels is forbidden in all EU countries under the Marketing and Use directive (76/769/EEC). Under EC regulation No 782/2003, application of TBT antifoulings on all ships/boats flying flags of EU countries are also banned and those with active TBT antifoulings are forbidden from entering European ports and harbors.

Ships over 400 gross tonnage flying flags of EU countries must be surveyed and carry certificates of compliance with this directive. Ships over 24 m in length and less than 400 gross tonnage must self-certify as compliant.

#### Sweden

Use of antifouling products is evaluated on a case by case basis using risk assessment to determine if the paint's use is acceptable.

#### Denmark

Import marketing and use of biocidal antifouling paint where the release of copper exceeds 200µg Cu/cm<sup>2</sup> after the first 14 days and 350µg copper /cm<sup>2</sup> after the first 30 days is banned for use on pleasure crafts of 200 kg and above, and which are mainly used in saltwater.

Import, marketing and use of biocidal antifouling paint for use on pleasure crafts less than 200 kg and mainly used in salt water is banned. This does not apply for wooden boats. And it does not apply for pleasure crafts belonging to harbours classified as A or B for insurance purposes.

Use of 'Irgarol 1051' and 'diuron' in antifoulings applied to pleasure craft banned

#### UK

Use of organic biocides 'Irgarol 1051' and 'Diuron' in antifoulings banned

NL – use of 'Diuron' in antifoulings banned

### JAPAN

Antifouling paints applied in Japanese shipyards should be registered as TBT-free by Japanese Paint manufacturers association (JPMA). All substances used in antifoulings must be registered on Japanese inventory of notified substances (METI list)

#### Restrictions

Application of TBT antifoulings in Japan is forbidden

### CHINA

All substances imported and used in antifoulings applied in China must be registered on Chinese inventory of existing substances with the Government.

#### HONG KONG

All antifouling paints applied in Hong Kong must be registered

### SOUTH KOREA

All substances used in antifoulings applied in S Korea must be registered on the Korean existing chemicals list

### SINGAPORE / MALAYSIA / VIETNAM / THAILAND / INDONESIA / INDIA

To date no registration procedures for antifouling paints exist under pesticide / biocide laws

### AUSTRALIA

All antifoulings applied in Australia require registration with NRA (National Registration Authority) under pesticide laws

#### Restrictions

Application of TBT antifoulings forbidden

### NEW ZEALAND

Antifouling paints are regulated under the standard chemical regulations governing general paints.

#### Restrictions

Application of TBT antifoulings is forbidden

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## The Legislative Position

### Key Points Summary

October 2008 Update

#### OVERVIEW

Antifouling paints containing biocides are classed as biocidal products and are regulated like pesticides in many countries

Whilst biocidal antifouling products are important to the shipping industry for economic and environmental reasons, those deemed damaging to the environment or dangerous to human health will be eventually phased out.

When evaluating the safety of antifoulings to man and the environment, key issues are:

- Effects on non-target organisms
- The length of time biocides remain in the environment
- Build up in the marine food chain
- safety during application

Foul release coatings which do not rely on biocides to work (eg Intersleek) do not require registration as pesticides or biocidal products

#### THE INTERNATIONAL CONVENTION ON THE CONTROL OF HARMFUL ANTI-FOULING SYSTEMS ON SHIPS



**On September 17<sup>th</sup> 2008 the IMO Anti-fouling System (AFS) Convention entered into force. Under the Convention rules apply in all countries who have ratified the Convention (ie. those countries who have signed up to the Convention and brought in national laws to implement it). Key elements of the IMO-AFS Convention are :**

- a ban on application of TBT anti-foulings on all ships
- a ban on the presence of TBT on ships hulls (sealer-coats accepted as route for compliance)
- all vessels with active TBT on the hull are forbidden from entering the ports and harbors of countries who have ratified the convention
- vessels over 400 GT must be surveyed and certified as compliant. Vessels less than 400 GT but greater than 24 m LOA must self-certify their compliance

The Convention has ability to ban other harmful antifoulings in future (criteria to do this included in the Convention)

From 1/1/2008 all ships coated with active TBT antifoulings were be forbidden from entering EU ports and harbors under European law.

Countries who have ratified the IMO-AFS Convention are : Antigua and Barbuda, Australia, Bahamas, Bulgaria, Cook Is., Croatia, Cyprus, Denmark, France, Greece, Iceland, Japan, Kiribati, Latvia, Lithuania, Luxembourg, Marshall Is., Mexico, the Netherlands, Nigeria, Norway, Panama, Poland, Romania, St Kitts and Nevis, Sierra Leone, Slovenia, Spain, Sweden, Tuvalu. (Source IMO website 29/9/08).

#### ANTIFOULING PAINTS - REGULATORY PROGNOSIS

As the IMO-AFS Convention is now in force, TBT antifoulings are banned by all countries who have ratified it. TBT is also banned in all countries of the European Union under EU law.

In future, the use of biocidal anti-fouling paints (including those containing copper) will become more regulated, especially in sensitive environments.

International Paint carries out thorough risk assessments for all its antifouling products to ensure they can be used safely in the environment.

Effective biocidal antifouling paints and biocide-free fouling release coatings which do not damage the environment will continue to be available from International Paint.

#### COPPER IN ANTIFOULING PAINTS

The use of copper in antifouling paints has been reviewed by most governments regulating antifouling paints, it's use determined as safe and approval granted for use. Restrictions on the use of copper in pleasure craft antifoulings have been introduced in specific areas of *Sweden* :

##### *Sweden*

The Baltic Sea is considered environmentally sensitive due to its low salinity. It is inhabited by a relatively small number of delicate aquatic species. The Swedish authorities have therefore applied the Precautionary Principle and banned copper from use on pleasure craft operating in coastal areas of the Baltic Sea without consideration of all the scientific evidence. Although the importance of protecting this unique aquatic environment is recognised, adverse effects from copper, originating from anti-fouling paints, have never been observed in this region.

##### *Netherlands*

It has long been recognised that copper levels within certain inland waterways in the Netherlands are uniquely high due to the quantity of pollution present from rivers originating in other parts of Europe. These copper levels are neither related to, or effected by, the use of copper in anti-fouling paints and there has been no observed effect on the environment. The Dutch authorities however, tried to ban the sale of copper-containing anti-fouling paints for use on pleasure craft in the Netherlands. This proposal was overturned by the Dutch courts which ruled that the case made by the government authorities to ban copper-based antifoulings was not proven.

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