

# **Prohibition of Paints Containing Cybutryne**

## **Amended Rules and Guidance**

Rules for Anti-Fouling Systems on Ships  
Guidance for Anti-Fouling Systems on Ships

## **Reason for Amendment**

The International Convention on the Control of Harmful Anti-Fouling Systems on Ships (hereinafter referred to as the “AFS Convention”) prohibits the use of organotin compounds with respect to anti-fouling systems in order to protect the marine environment and human health and AFS Convention requirements related to this prohibition have already been incorporated into the NK Rules.

Since the AFS Convention entered into force in 2008, various alternatives to organotin compounds have been used for anti-fouling purposes. One of the alternatives used in anti-fouling paints over the years has been the biocide cybutryne; however, the environmental and ecological effects of using cybutryne were examined and were found to be clearly detrimental. For this reason, the prohibition of paints containing cybutryne was proposed at the 71<sup>st</sup> Session of the IMO Marine Environment Protection Committee (MEPC 71) held in July 2017.

As a result of its consideration of the above proposal, the IMO decided to amend the AFS Convention so as to prohibit the use of paints containing cybutryne and this amendment was adopted as Resolution MEPC.331(76) at the 76<sup>th</sup> Session of the IMO Marine Environment Protection Committee (MEPC 76) held in June 2021. In addition, amendments of relevant guidelines were adopted as Resolutions MEPC.356(78) and MEPC.358(78) at the 78<sup>th</sup> Session of the IMO Marine Environment Protection Committee (MEPC 78) held in June 2022.

Accordingly, relevant requirements are amended in accordance with Resolutions MEPC.331(76), MEPC.356(78) and MEPC.358(78).

## **Outline of Amendment**

Specifies requirements for the prohibition of the use of anti-fouling paints containing cybutryne.

“Rules for anti-fouling systems on ships” has been partly amended as follows:

## **Chapter 3 ANTI-FOULING SYSTEMS AND BARRIERS**

### **3.2 Anti-fouling Systems**

Paragraph 3.2.1 has been amended as follows.

#### **3.2.1 General**

Anti-fouling systems on ships are to be controlled so as to limit any substances deemed harmful to the marine environment from being used in anti-fouling systems in accordance with those requirements given in **3.2.2** and **3.2.3**.

Paragraph 3.2.3 has been added as follows.

#### **3.2.3 Cybutryne**

1 Anti-fouling systems containing cybutryne are not to be applied or re-applied.

2 Existing anti-fouling systems on ships are not to use cybutryne exceeding levels separately specified by the Society.

### **3.3 Barriers**

Paragraph 3.3.1 has been amended as follows.

#### **3.3.1 General\***

~~In cases where any anti-fouling systems not complying with those requirements given in 3.2 have been applied to ships and cannot be removed, existing non-compliant systems are to be covered by sealer coats deemed appropriate by the Society to form a barrier against organotin compounds leaching out from underlying non-compliant anti-fouling systems.~~ In the case of ships using anti-fouling systems containing cybutryne and not complying with 3.2 (except 3.2.3-1) as of 1 January 2023, such systems are to be removed or covered by sealer coats deemed appropriate by the Society at the next scheduled change or replacement of the system, but does not take place no later than 60 months following the last application of the anti-fouling system. This, however, does not include the following ships:

- (1) Fixed and floating platforms, FSOs, and FPSOs that are constructed prior to 1 January 2023 and that are not in dry-dock on or after 1 January 2023;
- (2) Ships not engaged in international voyages; and
- (3) Ships of less than 400 gross tonnage engaged in international voyages, if accepted by the concerned coastal states.

“Guidance for anti-fouling systems on ships” has been partly amended as follows:

## Chapter 2 SURVEYS

### 2.1 General

#### 2.1.2 Time of Surveys

Sub-paragraph -4 has been amended as follows.

~~4~~ For the purpose of the Rules, with respect to ~~appropriate attention is to be paid to the following issues in relation to the implementation schemes of the Convention~~ ships complying with 3.2 (except 3.2.3-1) or not using anti-fouling systems containing cybutryne as of 1 January 2023, care is to be taken by responsible persons to ensure that the confirmation of such is obtained no later than 31 December 2024 by submitting the documents specified in **2.3.2-1 of the Rules**.

~~(1) Ships which were at the beginning stage of construction before 17 September 2008 and on which anti-fouling systems complying with those requirements given in 3.2 of the Rules before that date are subject to initial surveys for the Convention carried out until the first time of any change or replacement of their anti-fouling systems on or after that date.~~

~~(2) For ships which were at the beginning stage of construction before 17 September 2008 and on which anti-fouling systems not complying with those requirements given in 3.2 of the Rules have been applied before that date, any existing non-compliant anti-fouling systems on these ships are to be removed or covered and then compliant anti-fouling systems are to be applied to them before that date. These ships are subject to initial surveys for the Convention carried out until 16 September 2010 or the first time of any changes or replacements of their anti-fouling system on or after 17 September 2008, whichever is earlier.~~

### 2.3 Registration Surveys Not Built under the Survey

#### 2.3.1 General

Sub-paragraph -2(2) has been amended as follows.

**2** With respect to the provisions of **2.3.1 of the Rules**, samplings of coatings are to be carried out in accordance with the following:

- (1) Sample points on hulls are to be selected as per Surveyor direction. In cases where necessary for verification of the overall conditions of the coatings of ships, in general, 9 points from the bottom and both sides in forward, middle and afterward parts are to be taken.
- (2) Samplings of coatings and analysis are to be made by manufacturers or public agents deemed appropriate by the Society referring to the Annex of resolution ~~MSC/MEPC.104(49)~~ **356(78)**.
- (3) The criteria for the results of such analysis are to be in accordance with those requirements given in **3.2 of the Rules**.

## Chapter 3 ANTI-FOULING SYSTEMS AND BARRIERS

### 3.2 Anti-fouling Systems

Paragraph 3.2.3 has been added as follows.

#### **3.2.3 Cybutryne**

The “levels separately specified by the Society” referred to in 3.2.2 of the Rules is to be taken as 1,000 mg of cybutryne per kg of dry paint in cases where samples are directly taken from the hull, and 200 mg of cybutryne per kg of dry paint in cases where samples are taken from wet paint containers.

### 3.3 Barriers

#### **3.3.1 General**

Sub-paragraph -1 has been amended as follows.

**1** Sealer coats deemed appropriate by the Society referred to in **3.3.1 of the Rules** means those paints recommended by manufacturers to form barriers preventing ~~organotin compounds~~ cybutryne from leaching out of any underlying non-compliant anti-fouling systems.

**2** For the purpose of the Rules, colours of barriers are to be selected so that such barriers can be distinguished from any underlying anti-fouling systems and any newly applied anti-fouling systems on such barriers.