

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the TBT-Free Anti-Fouling Systems**with type designation(s)  
**Micron 77**

Issued to

**International Paint Limited  
Gateshead, Tyne and Wear, United Kingdom**

is found to comply with

**DNV GL class programme DNVGL-CP-0110 – Type approval – Anti-fouling systems****Application :****Organotin-free self-polishing copolymer anti-fouling.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2018-06-01**for **DNV GL**This Certificate is valid until **2023-05-31**.DNV GL local station: **Newcastle-upon-Tyne**Approval Engineer: **Gisle Hersvik****Rikard Törnqvist  
Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-026482-1**  
Certificate No: **TAK000018C**

## Product description

Organotin-free self-polishing copolymer anti-fouling paint; **Micron 777**

### Colours:

The product may be available in other colours. Please contact the local International Paint representative for details.

### Active ingredients:

Cuprous oxide	CAS No. 1317-39-1
bis(1-hydroxy-1Hpyridine-2-thionato-O, S)copper	CAS No. 14915-37-8

## Application/Limitation

The issuance of this certificate is solely connected to the control of the Anti-Fouling System, AFS, with regard to compliance with the International Convention on the Control of Harmful Anti-Fouling Systems on Ships.

## Type Approval documentation

1. Application for Type Approval of 2017-05-10.
2. TDS and MSDS, Test Certificate 08/257/MPm from PRA, UK of 2009-03-06.

## Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**, with the following test result, ref. Test Certificate 08/257/MPm from PRA, UK of 2009-03-06:

- **Micron 77** (Navy YBA476): 0.0640 % tin (no TBT detected)

## Marking of product

Product shall be marked with *manufacturer's name*; **International Paint Limited, UK** and *type designation*; **Micron 77**.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV GL Type Approval Certificate.

## Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical Assessment to be performed after 2 and 3.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

The main elements of the Periodical Assessment are to:

- Ensure that **Type Approval documentation** is available.
- Review design, materials, production process, and performance with respect to possible changes, in order to ensure compliance with **Type Approval documentation** and/or referenced material specifications.
- Ensure traceability between manufacturer's product marking and the DNV GL Type Approval Certificate.

END OF CERTIFICATE