

TYPE APPROVAL CERTIFICATE

This is to certify:

That the TBT-Free Anti-Fouling Systems

with type designation(s)
Intersmooth 360 SPC and Intersmooth 365 SPC

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 anti-fouling system.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2021-06-29**.

Issued at **Høvik** on **2016-06-30**

DNV GL local station: **Newcastle-upon-Tyne**

Approval Engineer: **Gisle Hersvik**

for **DNV GL**

Arnstein Gloppen
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: **262.1-022235-1**
Certificate No: **TAK00000DE**

Product description

Organotin-free self-polishing anti-fouling paints; **Intersmooth 360 SPC and Intersmooth 365 SPC**

Colours:

The products are available in various colours. Please contact your local International Paint Representative for details.

Active ingredients – World-wide:

CAS No. 1317-39-1 Copper(1)oxide
CAS No. 13463-41-7 Zinc Pyrithione

Active ingredients - UK:

CAS No. 1317-39-1 Copper(1)oxide
CAS No. 13463-41-7 Zinc Pyrithione
CAS No. 14915-378 Copper pyrithione
- the anti-fouling paint contain either copper oxide and zinc pyrithione or copper oxide and copper pyrithione. These are differentiated by their sales codes.

Manufactured by

Akzo Nobel Pty Ltd, 51 McIntyre Road, PO Box 26, Sunshine, North Vic 3020, Australia

DNV GL local office: Sydney

Akzo Nobel Ltda (Brazil), Av Paiva 999, NevesSao Goncalo, Cep 24426-140, Rio De Janeiro, Brazil

DNV GL local office: Rio de Janeiro

Akzo Nobel Coatings India (Private) Ltd., Plot #62P, 62A, 62B, 43E, Hoskote Industrial Area, Bangalore, 562 114, India

DNV GL local office: Mumbai

International Paint (Korea) Ltd., 8-6B/L Chilseo Industrial Complex, Kyenae-Ri, Chilseo-Myeon, Haman-Gun, Kyungsangnam-Do, Republic of Korea

DNV GL local office: Changwon

International Paint Saudi Arabia Ltd, P O Box 37, Damman, Saudi Arabia

DNV GL local office: Bahrain

International Paint Singapore (Pte) Ltd, 3 Neythal Road, Jurong Town, Singapore

DNV GL local office: Singapore

Akzo Nobel Coatings Ltd., 34 Moo 4, Petchkasem Rd, Km. 28.5 Omyai, Sampran, Nakornpathom 73160, Thailand

DNV GL local office: Bangkok

International Paint Limited, Stoneygate Lane, Felling, Gateshead, Tyne & Wear, NE10 0JY, United Kingdom

DNV GL local office: Newcastle-upon-Tyne

Responsibility

The Company (stated on the front page of this Certificate) takes the responsibility that both design and production are in compliance with Rules, Standards and/or Regulations listed on page 1 of this certificate.

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.

It does not cover verification of surface preparation, corrosion protection, fire, health and safety precautions, durability of the AFS or environmental properties other than regulated by the Convention.

Type Approval documentation

- 1.
- 2.
- 3.
- 4.

Tests carried out

Type Testing carried out according to **Type Approval documentation**, with the following test results, ref. Test Report UK) from SINTEF Kjemi, Oslo, Norway of 2003-12-10 and Test Report (KOR) from FITI Testing and Research Institute, Seoul, Korea of 2003-02-26:

- | | |
|-------------------------------------|--|
| - Intersmooth 360 SPC (UK): | 0.0720 % tin (No TBT-compounds detected) |
| - Intersmooth 360 SPC (KOR): | 0.0388 % tin (No TBT-compounds detected) |
| - Intersmooth 365 SPC (UK): | 0.0480 % tin (No TBT-compounds detected) |
| - Intersmooth 365 SPC (KOR): | 0.0310 % tin (No TBT-compounds detected) |

Marking of product

Product shall be marked with *manufacturer's name*; **International Paint Limited**, *place of production* and *type designation*.

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 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