

TYPE APPROVAL CERTIFICATE

This is to certify:

That the TBT-Free Anti-Fouling Systems

with type designation(s)
SeaQuantum Plus III

Issued to

Jotun A/S
SANDEFJORD, Norway

is found to comply with

DNV GL class programme DNVGL-CP-0110 – Type approval – Anti-fouling systems

Application :

Organo-tin free self-polishing hydrolysing type anti-fouling system.

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

Issued at **Høvik** on **2019-11-11**

This Certificate is valid until **2024-11-10**.

DNV GL local station: **Sandefjord**

for **DNV GL**

Approval Engineer: **Gisle Hersvik**

Gustav Heiberg
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: **262.1-032739-1**
Certificate No: **TAK00001U1**

Product description

Organo-tin free self-polishing hydrolyzing type anti-fouling paint; **SeaQuantum Plus III**

Colours:

The product may be available in various colours. Please contact the local Jotun representative for details.

Active ingredients:

CAS No. 1317-39-1 Cuprous oxide
CAS No. 14915-37-8 Cuprous Pyrithione

Manufactured by

Jotun Boya San. ve Tic. A.Ş., Organize Sanayi Bolgesi, Gazi Osman Pasa Mahallesi, Ulusoy Cad, No:6 & No:8, Cerkezkoy 59500 Tekirdag, Turkey

DNV GL local station: Istanbul

Jotun U.A.E. Ltd. (L.L.C.), Near Old National Taxi depot, Street 17A, P.O.Box 3671, Alquoz Industrial Area 2, Dubai, United Arab Emirates

DNV GL local station: Dubai

Jotun India Private Limited, Plot D 280, Ranjangaon MIDC, Village Karegaon, Taluka Shirur, Pune 412220, Maharashtra State, India

DNV GL local station: Mumbai

Chokwang Jotun Ltd., Head Office, 96, Gwahaksandan, 1-ro, Gangseo-gu, Busan, 46742, South Korea

DNV GL local station: Busan

Jotun Coatings (ZJG) Co. Ltd., No. 15 Changjiang Road, Jiangsu Yangtze River International Chemical Industry Park, Zhangjiagang Free Trade Zone, Jiangsu 215634, P.R. China

DNV GL local station: Nanjing

Jotun COSCO Marine Coatings (Qingdao) Co., Ltd., South of Chunyang Road and East of Huaguan Road, Qingdao National High-Tech Industrial Development Zone, Qingdao, P.R. China

DNV GL local station: Qingdao

Jotun Paints (Malaysia) Sdn.Bhd. - Nilai Factory, Lot 9143, PN 38500, Kawasan Perindustrian Nilai, 71800 Nilai, Negeri Sembilan, Malaysia

DNV GL local station: Kuala Lumpur

Jotun Iberica S.A., Poligon Industrial Santa Rita Calle Estàtica, no 3 08755 - Castellbisbal Barcelona, Spain

DNV GL local station: Barcelona

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

Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**, with the following test results, ref. Test Reports from Molab as of 2019-10-23:

- **SeaQuantum Plus III:** <0,02% (No TBT-compounds detected)

Marking of product

Product shall be marked with *manufacturer's name, 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 assessments (for Certificate Retention and Certificate Renewal) shall be performed according to DNVGL-CP-0338.

This certificate is only valid if required Periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnvgl.com>

END OF CERTIFICATE