



中國驗船中心
CR Classification Society

Certificate No. 940-23-014

Date May 09, 2023

型式認可證書
TYPE APPROVAL CERTIFICATE

This is to certify that the undernoted product(s) has/have been approved by CR Classification Society in accordance with the requirements given in CR Guidelines for Survey of Products for Marine Use as an approved type for use in ships classed or intended to be classed with the Society.

Manufacturer : BERLIN CO., LTD.

Approved Product(s) : Paint

Product/Model Name : Anti-Fouling System/SPC-300 Tin-free

This certificate is valid until May 08, 2028

CH IEN-HUA HUANG

中國驗船中心 總驗船師

Chief Surveyor

CR Classification Society

This certificate evidences that the type of the products of the Manufacturer has been assessed to be in compliance with the specified CR Rules or Guidelines and to be capable of providing the listed products. This Certificate may be cancelled by CR Classification Society if the applicant makes any changes or modifications relevant to the approval, which have not been notified to, and agreed in writing with the Society. Any person not a party to the contract pursuant to which this document is delivered may not assert a claim against CR Classification Society for any liability arising out of errors or omissions which may be contained in said documents, or for errors of judgment, fault or negligence committed by personnel of the Society.

Please refer to the CR website for the latest status of this approval: www.crclass.org/aw0/aw0.htm

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Name of Manufacturer:

Berlin Co., Ltd.

Address of Manufacturer:

No.43, Ta Yeh South Road., Hsiao-Kang District., Kaohsiung City 812050, Taiwan, R.O.C

Product Specification:

Type	:	A hydrolyzable, long-life performance boat bottom antifouling paint made by mixing special tin-free resin with inorganic cuprous oxide. This is a one component tin-free, hydrolyzing antifouling coating.
Use	:	To be used as finish coat in underwater only.
Color	:	Red-brown and Black
Volume solids	:	50±3%
Typical film thickness	:	Wet 150-200µm Dry 75-100µm
Theoretical coverage	:	24 m ² /L@75µm
Method of application	:	Airless-spray, air spray, rolling, brushing.
Flash point	:	>26°C

Requirements:

CR Rules

Guidelines for Survey of Products for Marine Use.

International Standard:

1. IMO AFS/CONF/26 "International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001".
2. IMO Resolution MEPC.195(61) "2010 Guideline for Survey and Certification on Anti-Fouling Systems on Ships".
3. IMO Resolution MEPC.331(76) "Amendments to The International Convention on The Control of Harmful Anti-Fouling Systems on Ships, 2001"

Document and Test Reports:

1. Technical data sheet dated May 09, 2023.
2. Safety data sheet dated November 21, 2022.
3. Test Report Ref no.: KV-23-00320A dated March 02, 2023, issued by SGS. The report indicates that Cybutryne Content is not detected in the subject coating.
4. Test Report Ref no.: KV-23-03179A dated April 19, 2023, issued by SGS. The report indicates that organic-tin compounds TBT (Tributyl Tin) is not detected in the subject coating.

(See next page for further details regarding the approval.)

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Application/Limitation :

1. Surface preparation and coating application should be carried out in accordance with the manufacturer's PTDS.
2. The durability of the coating system and other properties such as anti-fouling performance, evaluation of surface preparation, corrosion protection, adhesion, permeability, flexibility, fire resistance, volatile organic compound content, health and safety precautions aspects are excluded from the scope of this certificate.
3. Production items are to be manufactured in accordance with quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype.
4. The certificate is invalid if the formulation or either the type of biocide is changed.
5. Periodical assessment:
The intermediate audit is to be carried out within 3 months before or after the second anniversary date or within 3 months before or after the third anniversary date of the certificate. The intermediate audit will include, but not limited to, confirmation of operation of the manufacturer's quality system, compliance of production procedures with the technical documents accepted at the time of type approval, purchase control of raw materials, components and parts, use of survey marks and approved products logos, languages required to be used in nameplates and operation instructions, product quality feedback. In case where the intermediate audit items mentioned above are not practical, considerations will be given by the Society on a case-by-case basis.

- The End -