SLOVENSKI STANDARD
SIST EN ISO 15181-6:2014

01-julij-2014

Barve in laki - Določanje razmerja sproščanja biocidov iz barv proti obraščanju - 6. del: Določanje deleža sprostitve tralopirila s količinskim ovrednotenjem razkrojnih produktov v ekstraktu (ISO 15181-6:2012)

Paints and varnishes - Determination of release rate of biocides from antifouling paints - Part 6: Determination of tralopyril release rate by quantitation of its degradation product in the extract (ISO 15181-6:2012)

Beschichtungsstoffe - Bestimmung der Auswaschrate von Bioziden aus Antifouling-Beschichtungen - Teil 6: Bestimmung der Auswaschrate von Tralopyril durch Quantifizierung seiner Abbauprodukte im Extrakt (ISO 15181-6:2012)

Peintures et vernis - Détermination du taux de lixiviation des biocides contenus dans les peintures antisalissures - Partie 6: Calcul du taux de lixiviation du tralopyril par détermination de la concentration de son produit de dégradation dans l'extrait (ISO 15181-6:2012)

Ta slovenski standard je istoveten z: **EN ISO 15181-6:2014**

ICS:

87.040	Barve in laki	Paints and varnishes

SIST EN ISO 15181-6:2014 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 15181-6

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English Version

Paints and varnishes - Determination of release rate of biocides from antifouling paints - Part 6: Determination of tralopyril release rate by quantitation of its degradation product in the extract (ISO 15181-6:2012)

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Beschichtungsstoffe - Bestimmung der Auswaschrate von Bioziden aus Antifouling-Beschichtungen - Teil 6: Bestimmung der Auswaschrate von Tralopyril durch Quantifizierung seiner Abbauprodukte im Extrakt (ISO 15181-6:2012)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

The text of ISO 15181-6:2012 has been prepared by Technical Committee ISO/TC 35 “Paints and varnishes” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15181-6:2014 by Technical Committee CEN/TC 139 “Paints and varnishes” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2014, and conflicting national standards shall be withdrawn at the latest by December 2014.

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Endorsement notice

The text of ISO 15181-6:2012 has been approved by CEN as EN ISO 15181-6:2014 without any modification.

INTERNATIONAL STANDARD

ISO 15181-6

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Paints and varnishes — Determination of release rate of biocides from antifouling paints —

Part 6: Determination of tralopyril release rate by quantitation of its degradation product in the extract

Peintures et vernis — Détermination du taux de lixiviation des biocides contenus dans les peintures antisalissures —

Partie 6: Calcul du taux de lixiviation du tralopyril par quantitation de son produit de dégradation dans l'extrait

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 15181-6 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

ISO 15181 consists of the following parts, under the general title *Paints and varnishes — Determination of release rate of biocides from antifouling paints*:

- *Part 1: General method for extraction of biocides*
- *Part 2: Determination of copper-ion concentration in the extract and calculation of the release rate*
- *Part 3: Calculation of the zinc ethylene-bis(dithiocarbamate) (zineb) release rate by determination of the concentration of ethylenethiourea in the extract*
- *Part 4: Determination of pyridine–triphenylborane (PTPB) concentration in the extract and calculation of the release rate*
- *Part 5: Calculation of the tolylfluanid and dichlofluanid release rate by determination of the concentration of dimethyltolylsulfamide (DMST) and dimethylphenylsulfamide (DMSA) in the extract*
- *Part 6: Determination of tralopyril release rate by quantitation of its degradation product in the extract*

Introduction

By using standard conditions of temperature, salinity and pH at low biocide concentrations in the surrounding artificial seawater, a repeatable value of the release rate under the specified laboratory conditions can be determined using the method given in this part of ISO 15181, which can be used for quality assurance and material selection purposes. The actual release rate of biocides from antifouling paints on ships' hulls into the environment depends, however, on many factors, such as ship operating schedules, length of service, berthing conditions, paint condition, as well as temperature, salinity, pH, pollutants, and biological community.

The results of this test do not reflect environmental biocide release rates for antifouling products and are not suitable for direct use in the process of generating environmental risk assessments, producing environmental loading estimates or for establishing release rate limits for regulatory purposes. In comparison with copper and organotin release rate measurements obtained either by direct or indirect measurements of the copper release rate from ships' hulls and from measurements made on panels exposed in harbours, all available data indicate that the results of this generic test method significantly overestimate the release rate of biocide under in-service conditions. Published results demonstrate that the results of this test method are generally higher than direct *in-situ* measurements of copper and organotin release rate from the hulls of harboured ships by a factor of about 10 or more for several commercial antifouling coatings.[1][2] A similar relationship is expected to be found for other biocides. Realistic estimates of the biocide release from a ship's hull under in-service conditions can only be obtained from this test method if this difference is taken into account.

Where the results of this test method are used in the process of generating environmental risk assessments, producing environmental loading estimates or for regulatory purposes, it is most strongly recommended that the relationship between laboratory release rates and actual environment inputs be taken into account to allow a more accurate estimate of the biocide release rate from antifouling coatings under real-life conditions to be obtained. This can be accomplished through the application of appropriate correction factors.[2]