

SLOVENSKI STANDARD
oSIST prEN ISO 11844-3:2019
01-januar-2019

Korozija kovin in zlitin - Klasifikacija notranjih atmosfer z nizko korozivnostjo - 3. del: Merjenje okoljskih parametrov, ki vplivajo na korozivnost v zaprtih prostorih (ISO/DIS 11844-3:2018)

Corrosion of metals and alloys - Classification of low corrosivity of indoor atmospheres - Part 3: Measurement of environmental parameters affecting indoor corrosivity (ISO/DIS 11844-3:2018)

Korrosion von Metallen und Legierungen - Einteilung der Korrosivität in Räumen mit geringer Korrosivität - Teil 3: Messung der Umgebungsparameter, die Korrosivität in Räumen beeinflussen (ISO/DIS 11844-3:2018)

Corrosion des métaux et alliages - Classification de la corrosivité faible des atmosphères d'intérieur - Partie 3: Mesurage des paramètres environnementaux affectant la corrosivité des atmosphères d'intérieur (ISO/DIS 11844-3:2018)

Ta slovenski standard je istoveten z: prEN ISO 11844-3

ICS:

77.060

Korozija kovin

Corrosion of metals

oSIST prEN ISO 11844-3:2019

en,fr,de

ITeH STANDARD PREVIEW
(standards.iteh.ai)

Full standard:
<https://standards.iteh.ai/catalog/standards/sist/fb8119ed-40be-4dd5-adca-94c11dfdda3b/osist-pre-nl-so-11844-3-2019>

DRAFT INTERNATIONAL STANDARD

ISO/DIS 11844-3

ISO/TC 156

Secretariat: SAC

Voting begins on:
2018-11-12Voting terminates on:
2019-02-04

Corrosion of metals and alloys — Classification of low corrosivity of indoor atmospheres —

Part 3: Measurement of environmental parameters affecting indoor corrosivity

*Corrosion des métaux et alliages — Classification de la corrosivité faible des atmosphères d'intérieur —
Partie 3: Mesurage des paramètres environnementaux affectant la corrosivité des atmosphères d'intérieur*

ICS: 77.060

PRELIMINARY DRAFT STANDARD
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/1b8119ed-4061-4d05-adca-94c11d6dda3b/osist-pre-n-iso-11844-3-2019>

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING



Reference number
ISO/DIS 11844-3:2018(E)

© ISO 2018

ITEH STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/fb8119ed-40be-4dd5-adca-94c11d8dda3b/osist-pr-en-iso-11844-3-2019>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Environmental parameters	2
6 Humidity and temperature parameters	2
6.1 Relative humidity.....	2
6.2 Temperature.....	2
6.3 Temperature–humidity complex.....	3
7 Airborne gas contaminants	3
7.1 Principle.....	3
7.2 Placing of measuring equipment.....	3
7.2.1 General.....	3
7.2.2 Continuous gas-measuring instruments.....	3
7.2.3 Active sampler.....	3
7.2.4 Passive sampler.....	3
7.2.5 Gas-deposition equipment.....	3
7.3 Measuring methods and duration.....	4
7.3.1 Continuous measurement.....	4
7.3.2 Measurement and calculation with the active sampler.....	4
7.3.3 Measurement and calculation with the passive sampler.....	4
7.3.4 Measurement and calculation of deposition rate of gas pollution.....	6
8 Airborne particle contaminants	6
8.1 Principle.....	6
8.2 Volumetric measurements.....	6
8.3 Measurement of particle deposits.....	7
9 Dry deposition velocity and measurements of air flow	7
Annex A (informative) Reagents used for both passive and active samplers	8
Bibliography	10

ISO/DIS 11844-3:2018(E)

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*.

This second edition cancels and replaces the first edition (ISO 11844-3:2006), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the normative references have been updated;
- reference to ISO 16000 in the [Clause 5](#) has been added;
- detection limits in [7.3.1](#) and [7.3.2](#) have been updated;
- new [Clause 8](#) has been added.

A list of all parts in the ISO 11844 series can be found on the ISO website.

Introduction

This document deals with environmental parameters for the characterisation of indoor atmospheres and methods of measurement.

The environmental parameters for the characterisation of indoor atmospheres include more airborne contaminants than are normally used for the characterisation of the outdoor environment.

Measurement of environmental parameters is a way of characterising the corrosivity of the indoor atmosphere and will always be required if it is necessary to consider measures for reducing the corrosivity.

ITEH STANDARD PREVIEW
(standards.iteh.ai)
Full standard:
<https://standards.iteh.ai/catalog/standards/sist/fb8119ed-40be-4dd5-adca-94c11d8dda3b/osist-pre-nl-so-11844-3-2019>

ITeH STANDARD PREVIEW
(standards.iteh.ai)

Full standard:
<https://standards.iteh.ai/catalog/standard/standards/iso/11844-3-2019/4d5-adca-94c11d8da3b/osist-pre-nl-iso-11844-3-2019>

Corrosion of metals and alloys — Classification of low corrosivity of indoor atmospheres —

Part 3: Measurement of environmental parameters affecting indoor corrosivity

1 Scope

This document describes methods for measuring the environmental parameters used to classify the corrosivity of indoor atmospheres on metals and alloys.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7708, *Air quality — Particle size fraction definitions for health-related sampling*

ISO 9225, *Corrosion of metals and alloys — Corrosivity of atmospheres — Measurement of environmental parameters affecting corrosivity of atmospheres*

ISO 11844-1, *Corrosion of metals and alloys — Classification of low corrosivity of indoor atmospheres — Part 1: Determination and estimation of indoor corrosivity*

EN 12341, *Air quality — Determination of the PM₁₀ fraction of suspended particulate matter — Reference method and field test procedure to demonstrate reference equivalence of measurement methods*

ISO 16000-1, *Indoor air — Part 1: General aspects of sampling strategy*

ISO 16000-5, *Indoor air — Part 5: Sampling strategy for volatile organic compounds (VOCs)*

ISO 16000-15, *Indoor air — Part 15: Sampling strategy for nitrogen dioxide (NO₂)*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

4 Principle

Different combinations of parameters affect the corrosivity of indoor atmospheres. Knowledge about possible sources of environmental effects must be obtained before decisions regarding the type of measurements needed are taken. The characterisation of indoor atmospheric corrosivity using environmental parameters is more complicated than measuring the corrosivity with metal specimens. However, in many cases, measurement of environmental parameters can give a good indication of how