



SLOVENSKI STANDARD SIST EN ISO 11844-1:2008

01-julij-2008

Corrosion of metals and alloys - Classification of low corrosivity of indoor atmospheres - Part 1: Determination and estimation of indoor corrosivity (ISO 11844-1:2006)

Corrosion of metals and alloys - Classification of low corrosivity of indoor atmospheres - Part 1: Determination and estimation of indoor corrosivity (ISO 11844-1:2006)

iTeh STANDARD PREVIEW

Corrosion des métaux et alliages - Classification de la corrosivité faible des atmospheres d'intérieur - Partie 1: Détermination et estimation de la corrosivité des atmospheres d'intérieur (ISO 11844-1:2006)

<https://standards.iteh.ai/catalog/standards/sist/532683e8-912e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008>

Ta slovenski standard je istoveten z: **EN ISO 11844-1:2008**

ICS:

77.060 Korozija kovin Corrosion of metals

SIST EN ISO 11844-1:2008 en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 11844-1:2008

<https://standards.iteh.ai/catalog/standards/sist/532683e8-912e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008>

ICS 77.060

English Version

Corrosion of metals and alloys - Classification of low corrosivity
of indoor atmospheres - Part 1: Determination and estimation of
indoor corrosivity (ISO 11844-1:2006)

Corrosion des métaux et alliages - Classification de la
corrosivité faible des atmosphères d'intérieur - Partie 1:
Détermination et estimation de la corrosivité des
atmosphères d'intérieur (ISO 11844-1:2006)

Korrosion von Metallen und Legierungen - Einteilung der
Korrosivität in Räumen mit geringer Korrosivität - Teil 1:
Bestimmung und Abschätzung der Korrosivität in Räumen
(ISO 11844-1:2006)

This European Standard was approved by CEN on 21 March 2008.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword.....3

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 11844-1:2008
<https://standards.iteh.ai/catalog/standards/sist/532683e8-912e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008>

Foreword

The text of ISO 11844-1:2006 has been prepared by Technical Committee ISO/TC 156 "Corrosion of metals and alloys" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 11844-1:2008 by Technical Committee CEN/TC 262 "Metallic and other inorganic coatings" the secretariat of which is held by BSI.

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 October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

iTeh STANDARD PREVIEW
Endorsement notice
(standards.iteh.ai)

The text of ISO 11844-1:2006 has been approved by CEN as a EN ISO 11844-1:2008 without any modification.

[SIST EN ISO 11844-1:2008](https://standards.iteh.ai/catalog/standards/sist/532683e8-912e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008)

<https://standards.iteh.ai/catalog/standards/sist/532683e8-912e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 11844-1:2008

<https://standards.iteh.ai/catalog/standards/sist/532683e8-912e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008>

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

**Part 1:
Determination and estimation of indoor
corrosivity**

iTeh STANDARD PREVIEW

(standards.iteh.ai)
*Corrosion des métaux et alliages — Classification de la corrosivité
faible des atmosphères d'intérieur —*

*Partie 1: Détermination et estimation de la corrosivité des atmosphères
d'intérieur*

<https://standards.iteh.ai/catalog/standards/sist/532683e8-912e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008>



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 11844-1:2008](https://standards.iteh.ai/catalog/standards/sist/532683e8-912e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008)

<https://standards.iteh.ai/catalog/standards/sist/532683e8-912e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008>

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword.....	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions.....	2
4 Symbols and abbreviations	2
5 Classification of corrosivity.....	3
5.1 General.....	3
5.2 Categories of indoor corrosivity	3
6 Determination of indoor atmospheric corrosivity	3
7 Characterization of indoor atmospheres with respect to indoor corrosivity	3
7.1 General.....	3
7.2 Estimation of indoor corrosivity	4
Annex A (informative) Relation between ISO, IEC and ISA classification systems	6
Annex B (informative) Outdoor and indoor concentrations of some of the most important pollutants in different types of environments	9
Annex C (informative) General characterisation of metal corrosion in indoor atmospheres	10
Annex D (informative) Guideline for estimation of indoor corrosivity.....	13
Bibliography	16

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.

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.

ISO 11844-1 was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*.

ISO 11844 consists of the following parts, under the general title *Corrosion of metals and alloys — Classification of low corrosivity of indoor atmospheres*:

- *Part 1: Determination and estimation of indoor corrosivity*
- *Part 2: Determination of corrosion attack in indoor atmospheres*
- *Part 3: Measurement of environmental parameters affecting indoor corrosivity*

Introduction

Metals, alloys and metallic coatings are subject to atmospheric corrosion under the impact of air humidity, especially when gaseous and solid substances of atmospheric pollution co-impact. Corrosivity data are of fundamental importance for derivation of suitable corrosion protection, or for evaluation of serviceability of metal elements of a product.

ISO 9223 classifies the atmospheric environment into 5 corrosivity categories.

Low-corrosivity indoor atmospheres are indoor atmospheres with C 1 (very low) or C 2 (low) corrosivity categories according to ISO 9223.

The classification in ISO 9223 is too broad for some purposes in low-corrosivity indoor atmospheres, e.g. places where electronic devices, sophisticated technical products, or works of art and historical objects are stored.

For such purposes, it is necessary to subdivide the corrosivity categories C 1 (very low) and C 2 (low) into indoor corrosivity categories in this part of ISO 11844.

The evaluation of low-corrosivity indoor atmospheres can be accomplished by direct determination of corrosion attack of selected metals (see ISO 11844-2) or by measurement of environmental parameters (see ISO 11844-3) which may cause corrosion on metals and alloys.

This part of ISO 11844 describes general procedures for derivation and estimation of indoor corrosivity categories.

[SIST EN ISO 11844-1:2008](https://standards.iteh.ai/catalog/standards/sist/532683e8-913e-465c-9613-09517732a64c/sist-en-iso-11844-1-2008)

A general approach to classification of corrosivity in indoor atmospheres is given in the scheme shown in Figure 1.