STN	Korózia kovov a zliatin. Skúšky korózie v umelej atmosfére. Zrýchlená skúška prerušovaným striekaním soľného roztoku vo vonkajšom prostredí (skúška SCAB) (ISO 11474: 1998).	STN EN ISO 11474
		03 8116

Corrosion of metals and alloys - Corrosion tests in artificial atmosphere - Accelerated outdoor test by intermittent spraying of a salt solution (Scab test) (ISO 11474:1998)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/14

Obsahuje: EN ISO 11474:2014, ISO 11474:1998

#### 119371

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2014 Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

## EUROPEAN STANDARD NORME EUROPÉENNE

## **EN ISO 11474**

EUROPÄISCHE NORM

March 2014

ICS 77.060

**English Version** 

#### Corrosion of metals and alloys - Corrosion tests in artificial atmosphere - Accelerated outdoor test by intermittent spraying of a salt solution (Scab test) (ISO 11474:1998)

Corrosion des métaux et alliages - Essais de corrosion en atmosphère artificielle - Essai de corrosion accéléré en extérieur par vaporisation intermittente d'un brouillard salin (Scab test) (ISO 11474:1998) Korrosion von Metallen und Legierungen -Korrosionsprüfung in künstlicher Atmosphäre -Beschleunigte Außenbewitterung (Freibewitterung) mit intermittierendem Sprühen einer Salzlösung (Scab-Test) (ISO 11474:1998)

This European Standard was approved by CEN on 9 February 2014.

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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-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 11474:2014 E

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### Foreword

The text of ISO 11474:1998 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 11474:2014 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 September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

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.

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#### Endorsement notice

The text of ISO 11474:1998 has been approved by CEN as EN ISO 11474:2014 without any modification.

# INTERNATIONAL STANDARD



First edition 1998-03-15

## Corrosion of metals and alloys — Corrosion tests in artificial atmosphere — Accelerated outdoor test by intermittent spraying of a salt solution (Scab test)

Corrosion des métaux et alliages — Essais de corrosion en atmosphère artificielle — Essai de corrosion accéléré en extérieur par vaporisation intermittente d'un brouillard salin («Scab test»)



#### 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.

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.

International Standard ISO 11474 was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys.* 

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#### Introduction

Corrosion testing under atmospheric exposure conditions is most commonly executed as field tests. As the corrosion rate depends on the environment of the test site, the latter should ideally be selected to best represent the environments in which the material is likely to be used. The results of field tests cannot therefore be used to predict service performance exactly but they do provide the best guidance to service performance. Field tests, however, may require exposure periods corresponding to the expected service life of a material.

To promote corrosion and accelerate the degradation process, test sites with a high atmospheric corrosivity can be used. Such test sites may be located in marine environments or in highly polluted industrial areas. To increase the corrosion rate at other test sites, artificial measures need to be adopted. In the method described, the corrosion process during outdoor exposure is accelerated by intermittently spraying a solution of sodium chloride (mass fraction 3 %) on to the test surface thus simulating and enhancing the environmental stress prevailing at marine test sites. The method is mainly intended for comparative testing and one or more reference materials are therefore always necessary. The results obtained do not permit any more far-reaching conclusions on the corrosion resistance of the tested metal in all environments in which it may be used. The method described can nevertheless give valuable information on the relative performance of materials in service.

NOTE — The title of this International Standard presents (within parentheses) a common name for this kind of test. Hitherto, "scab test" has been used mainly in a narrower sense to denote similar test methods developed within the car industry for the study of underfilm corrosion, particularly where painted steel surfaces have been locally damaged by stone shots. The word "scab" is no acronym. It simply refers to a well-known but not very pleasant disease and its symptom, i.e. a kind of crusty spots on the skin. In this International Standard, the same name is used in a wider sense to denote a test method which is applicable to all kinds of metallic substrate with or without coating. Some of these substrates will show a scab-like appearance after being tested. Others will not.

STN EN ISO 11474: 2014

# Corrosion of metals and alloys — Corrosion tests in artificial atmosphere — Accelerated outdoor test by intermittent spraying of a salt solution (Scab test)

#### 1 Scope

The purpose of this International Standard is to define a method of assessing the corrosion resistance of metals by an accelerated outdoor corrosion test.

In this International Standard, the term "metal" includes metallic materials with or without corrosion protection.

The accelerated outdoor corrosion test applies to

- organic coatings on metals;
- metallic coatings (anodic and cathodic);
- chemical conversion coatings;
- metals and their alloys.

The method is especially suitable for comparative testing in the optimization of surface treatment systems.

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2810:—1), Paints and varnishes — Notes for guidance on the conduct of natural weathering tests.

ISO 8407:1991, Corrosion of metals and alloys — Removal of corrosion products from corrosion test specimens.

ISO 8565:1992, Metals and alloys — Atmospheric corrosion testing — General requirements for field tests.

ISO 9226:1992, Corrosion of metals and alloys — Corrosivity of atmospheres — Determination of corrosion rate of standard specimens for the evaluation of corrosivity.

## koniec náhľadu – text ďalej pokračuje v platenej verzii STN

<sup>1)</sup> To be published. (Revision of ISO 2810:1974)