Coil coated metals - Test methods - Part 8: Resistance So objection ochological of the state of the to salt spray (fog)



## **FESTI STANDARDI FESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13523-8:2010 sisaldab Euroopa standardi EN 13523-8:2010 ingliskeelset teksti.

This Estonian standard EVS-EN 13523-8:2010 consists of the English text of the European standard EN 13523-8:2010.

Standard on kinnitatud Eesti Standardikeskuse 31.05.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.05.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 24.03.2010.

Date of Availability of the European standard text 24.03.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

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ICS 25.220.60

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# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 13523-8

March 2010

ICS 25.220.60

Supersedes EN 13523-8:2002

# **English Version**

# Coil coated metals - Test methods - Part 8: Resistance to salt spray (fog)

Tôles prélaquées - Méthodes d'essai - Partie 8: Résistance au brouillard salin

Bandbeschichtete Metalle - Prüfverfahren - Teil 8: Beständigkeit gegen Salzsprühnebel

This European Standard was approved by CEN on 20 February 2010.

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.

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

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# **Foreword**

This document (EN 13523-8:2010) has been prepared 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 September 2010, and conflicting national standards shall be withdrawn at the latest by September 2010.

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.

This document supersedes EN 13523-8:2002.

The main technical changes are:

- the text was revised editorially and the normative references were updated; a)
- b) specifying the cutting tool and detailing how to make the scribes;
- specifying the direction of cut to control the influence of burrs and cut edges: c)
- the hole in the test panel was made optional; d)
- the text was modified to give a clearer description of panel preparation before evaluation;
- the method for evaluation of corrosion creep was modified. f)

EN 13523, Coil coated metals — Test methods, consists of the following parts:

- Part 0: General introduction and list of test methods
- Part 1: Film thickness
- Part 2: Specular gloss
- Part 3: Colour difference Instrumental comparison
- Part 4: Pencil hardness
- Part 5: Resistance to rapid deformation (impact test)
- Part 6: Adhesion after indentation (cupping test)
- Part 7: Resistance to cracking on bending (T-bend test)
- Part 8: Resistance to salt spray (fog)
- Part 9: Resistance to water immersion
- Part 10: Resistance to fluorescent UV radiation and water condensation
- Part 11: Resistance to solvents (rubbing test)

- Part 12: Resistance to scratching
- Part 13: Resistance to accelerated ageing by the use of heat
- Part 14: Chalking (Helmen method)
- Part 15: Metamerism
- Part 16: Resistance to abrasion
- Part 17: Adhesion of strippable films
- Part 18: Resistance to staining
- Part 19: Panel design and method of atmospheric exposure testing
- Part 20: Foam adhesion
- Part 21: Evaluation of outdoor exposed panels
- Part 22: Colour difference Visual comparison
- Part 23: Colour stability in humid atmospheres containing sulfur dioxide
- Part 24: Resistance to blocking and pressure marking
- Part 25: Resistance to humidity
- Part 26: Resistance to condensation of water
- Part 27: Resistance to humid poultice (Cataplasm test)
- Part 29: Resistance to environmental soiling (Dirt pick-up and striping)

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, Croatia, 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.

## 1 Scope

This European Standard specifies the procedures for determining the resistance to salt spray (fog) of an organic coating on a metallic substrate (coil coating).

For steel neutral salt spray (fog) is usually used, and for aluminium acetic acid salt spray (fog).

#### 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 13523-0:2001, Coil coated metals — Test methods — Part 0: General introduction and list of test methods

EN 13523-7:2001, Coil coated metals — Test methods — Part 7: Resistance to cracking on bending (T-bend test)

EN 13523-19:2004, Coil coated metals — Test methods — Part 19: Panel design and method for atmospheric exposure testing

EN 60454-2, Pressure-sensitive adhesive tapes for electrical purposes — Part 2: Methods of test (IEC 60454-2:2007)

EN ISO 3696:1995, Water for analytical laboratory use — Specification and test methods (ISO 3696:1987)

EN ISO 4628-2, Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 2: Assessment of degree of blistering (ISO 4628-2:2003)

EN ISO 4628-8, Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 8: Assessment of degree of delamination and corrosion around a scribe (ISO 4628-8:2005)

EN ISO 9227:2006, Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227:2006)

EN ISO 17872, Paints and varnishes — Guidelines for the introduction of scribe marks through coatings on metallic panels for corrosion testing (ISO 17872:2007)

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13523-0:2001 apply.

#### 4 Principle

A test specimen is exposed to a salt spray (fog) for a specified period of time and assessed for possible corrosion expressed by a degree of delamination or corrosion creep and a degree of blistering.

# 5 Apparatus and materials

- 5.1 Salt spray cabinet, in accordance with EN ISO 9227.
- **5.2 Test solution,** as specified in 5.2.1 or 5.2.2 respectively.