# Coil coated metals - Test methods - Part 9: Resistance to water immersion

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### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13523-
9:2001 sisaldab Euroopa standardi EN
13523-9:2001 ingliskeelset teksti.

Käesolev dokument on jõustatud 19.12.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13523-9:2001 consists of the English text of the European standard EN 13523-9:2001.

This document is endorsed on 19.12.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

This part of EN 13523 describes the procedure for determining the resistance to water immersion of an organic coating on a metallic substrate.

### Scope:

This part of EN 13523 describes the procedure for determining the resistance to water immersion of an organic coating on a metallic substrate.

ICS 17.040.20, 25.220.60

**Võtmesõnad:** coating materials, coatings, condensation, dip coating, immersion, metal coating, metals, paints, resistance, specification (approval), specifications, testing, water

### EUROPEAN STANDARD NORME EUROPÉENNE

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ICS 17.040.20; 25.220.60

### English version

## Coil coated metals - Test methods - Part 9: Resistance to water immersion

Tôles prélaquées - Méthodes d'essai - Partie 9: Résistance à l'immersion dans l'eau

Bandbeschichtete Metalle - Prüfverfahren - Teil 9: Beständigkeit gegen Eintauchen in Wasser

This European Standard was approved by CEN on 18 February 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, 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

### **Foreword**

This European Standard 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 October 2001, and conflicting national standards shall be withdrawn at the latest by October 2001.

Annex A is normative.

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

### 1 Scope

This Part of EN 13523 describes the procedure for determining the resistance to water immersion of an organic coating on a metallic substrate.

The test is applicable to all kinds of organic coatings, including metallics and embossed, textured, pearlescent and printed coatings. The results of the test give an indication of the resistance of the coil coated metal to water.

The method is not intended to reproduce any particular condition of condensation.

### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 13523-0: 2001

Coil coated metals - Test methods - Part 0: General introduction and list of test methods

EN 23270: 1991

Paint and varnishes and their raw materials – Temperatures and humidities for conditioning and testing (ISO 3270:1984)

ISO 4628-2:1982

Paints and varnishes – Evaluation of degradation of paint coatings – Designation of intensity, quantity and size of common types of defect – Part 2: Designation of degree of blistering

IEC 60454-2

Specifications for pressure-sensitive adhesive tapes for electrical purposes – Part 2: Methods of test

#### 3 Terms and definitions

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

### 4 Principle

A test specimen is immersed in water of 40 °C for a defined period of time. The degree of blistering on the general surface and the corrosion at the cut edges and scribes are then evaluated.

NOTE The procedure described in this Part of EN 13523 is similar to the test method specified in EN ISO 2812-2. A major difference is that the water is not aerated.

### 5 Apparatus and materials

- **5.1 Tank**, of suitable size (a convenient size is 700 mm x 400 mm x 400 mm), fitted with a cover, a heater and capable of being maintained at  $(40 \pm 1)$  °C.
- 5.2 System for circulation or stirring of the water.
- **5.3 Support for the specimens**, made from non-conductive material and arranged so that the specimens are maintained at an angle of 15° to 20° to the vertical.
- **5.4 Deionized water**, having a conductivity not greater than 0,2 mS/m (mS/m = millisiemens per metre).