

Coil coated metals - Test methods - Part 11: Resistance to solvents (rubbing test)

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NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13523-11:2011 sisaldab Euroopa standardi EN 13523-11:2011 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 29.07.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.06.2011.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13523-11:2011 consists of the English text of the European standard EN 13523-11:2011.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 29.07.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 15.06.2011.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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English Version

Coil coated metals - Test methods - Part 11: Resistance to solvents (rubbing test)

Tôles prélaquées - Méthodes d'essai - Partie 11:
Résistance aux solvants (essai de frottement)

Bandbeschichtete Metalle - Prüfverfahren - Teil 11:
Beständigkeit gegen Lösemittel (Reibtest)

This European Standard was approved by CEN on 4 May 2011.

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Foreword

This document (EN 13523-11:2011) 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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

This document supersedes EN 13523-11:2004.

The main technical changes are:

A note to 6.1 has been introduced giving an example for the weight load on the artificial finger.

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.

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 United Kingdom.

1 Scope

This part of EN 13523 specifies the procedure for evaluating the degree of curing by determining the resistance of an organic coating on a metallic substrate to solvents.

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 23270, *Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing (ISO 3270:1984)*

3 Terms and definitions

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

4 Principle

The surface of the organic coating is rubbed with an absorbent material soaked in a specified solvent at a specified load.

5 Reagents and material

5.1 Absorbent material

Cotton wool of sufficient quantity to stay wet for the duration of the test and to prevent contact between the test panel and the artificial finger used under the conditions of the test.

Other materials such as textile or felt pads may be used but will give different results.

Materials with a hard surface shall not be used.

5.2 Solvent

Butanone (methyl ethyl ketone) shall be used if not otherwise specified.

6 Apparatus

6.1 A device with an artificial finger with a circular contact area between 100 mm² and 200 mm² of contact surface, capable of making longitudinal back and forth strokes (double strokes) under a pressure of (0,05 ± 0,01) MPa. The length of the strokes shall be at least 75 mm.

NOTE For example, for a pressure of 0,05 MPa and a contact area of 100 mm², a mass of 0,5 kg is required.