



SLOVENSKI STANDARD
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Prevlečene kovine, ki se navijajo - Preskusne metode - 0. del: Splošni uvod in seznam preskusnih metod

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

Bandbeschichtete Metalle - Prüfverfahren - Teil 0: Allgemeine Einleitung und Liste der Prüfverfahren

Tôles prélaquées - Méthodes d'essai - Partie 0 : Introduction générale et liste des méthodes d'essai

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17.040.20	Lastnosti površin	Properties of surfaces
25.220.60	Organske prevleke	Organic coatings

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FprEN 13523-0

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ICS 25.220.60

Will supersede EN 13523-0:2001

English Version

Coil coated metals - Test methods - Part 0: General introduction

Tôles prélaquées - Méthodes d'essai - Partie 0 :
Introduction générale

Bandbeschichtete Metalle - Prüfverfahren - Teil 0:
Allgemeine Einleitung

This draft European Standard is submitted to CEN members for formal vote. It has been drawn up by the Technical Committee CEN/TC 139.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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Contents	Page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Sampling	6
5 Preparation of test panels	6
6 Conditioning of test panels	6
7 Test conditions	6
Bibliography	7

Foreword

This document (FprEN 13523-0:2014) has been prepared by Technical Committee CEN/TC 139 “Paints and varnishes”, the secretariat of which is held by DIN.

This document is currently submitted to the Formal Vote.

This document will supersede EN 13523-0:2001.

The main technical changes are:

- a) the title of the standard was changed;
- b) the definitions were aligned with those in EN ISO 4618;
- c) the list of the existing parts of EN 13523 was updated;
- d) a note on rolling direction was added;
- e) the normative references were updated.

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

- *Part 0: General introduction*
- *Part 1: Film thickness*
- *Part 2: 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*

FprEN 13523-0:2013 (E)

- *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: Resistance to 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 (Cataplasma test)*
- *Part 29: Resistance to environmental soiling (Dirt pick-up and striping)*

The test methods described in the various parts of EN 13523 are based on the results of work of the European Coil Coating Association (ECCA), Brussels.

1 Scope

EN 13523 specifies test methods for organic coatings on coil coated metals.

This part of EN 13523 specifies the overall scope of all parts of EN 13523, gives definitions common to all parts and describes how sampling and preparation of test panels for most of the individual test methods are to be carried out.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13523 (all parts), *Coil coated metals — Test methods*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in the other parts of EN 13523 and the following apply.

3.1

category 1 coating

coating formed from the application of either liquid paint or coating powder that has a dry film thickness of up to 60 µm

3.2

category 2 coating

coating formed from the application of either liquid paint or coating powder that has a dry film thickness of greater than 60 µm, or a laminated plastics film

3.3

coat

layer of a coating material resulting from a single application

[SOURCE: prEN ISO 4618:2013, 2.49]

3.4

coating material

product, in liquid, paste or powder form, that, when applied to a substrate, forms a layer possessing protective, decorative and/or other specific properties

Note 1 to entry: For the purposes of EN 13523, plastics films are also considered as coating materials.

[SOURCE: prEN ISO 4618:2013, 2.51, modified]

3.5

coil coating metal

metal on which a coating material has been applied by coil coating

3.6

coil coating

coating process whereby the coating material is applied continuously to a coil of metal which may be rewound after the film has been dried

Note 1 to entry: This process may include cleaning and/or pre-treatment of the metal surface, and includes:

- either one-side or two-side, single or multiple application of (liquid) paints or coating powders which are subsequently cured
- or laminating with plastics films.

[SOURCE: prEN ISO 4618:2013, 2.56, modified]

3.7

organic coating

dry paint film of the coated product or the plastics film of the film/metal laminate

[SOURCE: EN 10169:2010+A1:2012, 3.20]

FprEN 13523-0:2013 (E)**3.8****paint**

pigmented coating material which, when applied to a substrate, forms an opaque dried film having protective, decorative or specific technical properties

[SOURCE: prEN ISO 4618:2013, 2.184]

3.9**pick-off**

amount of organic coating removed after the application and removal of an adhesive tape

3.10**substrate**

surface to which the coating material is applied or is to be applied

[SOURCE: prEN ISO 4618:2013, 2.244]

4 Sampling

Unless otherwise specified or agreed, take representative samples from the full width of the coil coated metal to be tested, of sufficient size to carry out the required tests.

5 Preparation of test panels

Prepare test panels from the representative samples obtained as described in Clause 4.

Unless otherwise specified or agreed, the test panels shall be flat and of the size specified in the individual test method.

NOTE Sampling with or across the rolling direction might influence the result of some test methods.

6 Conditioning of test panels

Test panels shall be brought to ambient temperature before testing.

Conditioning of test panels is not normally carried out. If specified or in case of dispute, condition the test panels immediately prior to the individual test at a temperature of $(23 \pm 2) ^\circ\text{C}$ and a relative humidity of $(50 \pm 5) \%$ in accordance with EN 23270, for a minimum of 24 h.

7 Test conditions

Carry out the test (including evaluation) at ambient temperature, if not otherwise specified by the individual test method. In cases of dispute, the test temperature shall be defined as $(23 \pm 2) ^\circ\text{C}$ and the relative humidity as $(50 \pm 5) \%$, in accordance with EN 23270.