

**Coil coated metals - Test methods - Part 17: Adhesion of
strippable films**

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NATIONAL FOREWORD

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English Version

Coil coated metals - Test methods - Part 17: Adhesion of strippable films

Tôles prélaquées - Méthodes d'essai - Partie 17:
Adhérence des films pelables

Bandbeschichtete Metalle - Prüfverfahren - Teil 17:
Haftfestigkeit von abziehbaren Folien

This European Standard was approved by CEN on 15 October 2011.

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

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Foreword

This document (EN 13523-17:2011) 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of an identical text or by endorsement, at the latest by June 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.

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 13523-17:2004.

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

The main technical changes are:

- A note has been added to definition 3.1 that strippable film also is referred to as protection foil.

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 two methods for determining the numerical evaluation of the adhesion of strippable films which have previously been applied to an organic coating on a metallic substrate.

Samples can be tested irrespective of whether the strippable film has been applied in the laboratory or on the production line.

NOTE Method 1 is preferred for films with adhesive and method 2 for films without adhesive.

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 23270:1991, *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 and the following apply.

3.1

strippable film

plastics film applied to the coated surface in order to afford a temporary protection against mechanical damage

NOTE Strippable film is also referred to as protection foil.

4 Principle

The force necessary to peel a film of given width from the surface of a coil coated material, at a defined angle and speed, is determined using appropriate instruments.

5 Apparatus

5.1 For method 1

5.1.1 Hydraulic or electronic dynamometer with:

- a movable jaw speed of (300 ± 30) mm/min;
- a measuring scale usually reading from 0 N to 10 N;
- a traction meter set so that the force required to strip the film lies between 15 % and 85 % of the measuring scale.