

|            |  |   |
|------------|--|---|
| <b>STN</b> | <b>Kontinuálne lakované kovy. Skúšobné metódy.<br/>Časť 23: Odolnosť proti vlhkým atmosféram s<br/>obsahom oxidu siričitého.</b> | <b>STN<br/>EN 13523-23</b><br><br>03 8761 |
|------------|--|---|

Coil coated metals - Test methods - Part 23: Resistance to humid atmospheres containing sulfur dioxide

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/15

Obsahuje: EN 13523-23:2015

Oznámením tejto normy sa ruší  
STN EN 13523-23 (03 8761) z januára 2003

**121935**

English Version

## Coil coated metals - Test methods - Part 23: Resistance to humid atmospheres containing sulfur dioxide

Tôles prélaquées - Méthodes d'essai - Partie 23 :  
Résistance à des atmosphères humides contenant du  
dioxyde de soufre

Bandbeschichtete Metalle - Prüfverfahren - Teil 23:  
Beständigkeit gegen feuchte, Schwefeldioxid enthaltende  
Atmosphären

This European Standard was approved by CEN on 27 May 2015.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

| <b>Contents</b>         |                             | <b>Page</b> |
|-------------------------|-----------------------------|-------------|
| European foreword ..... |                             | 3           |
| Introduction .....      |                             | 5           |
| 1                       | Scope .....                 | 6           |
| 2                       | Normative references .....  | 6           |
| 3                       | Terms and definitions ..... | 6           |
| 4                       | Principle .....             | 6           |
| 5                       | Apparatus .....             | 6           |
| 6                       | Sampling .....              | 7           |
| 7                       | Test specimens .....        | 7           |
| 8                       | Procedure .....             | 7           |
| 9                       | Expression of results ..... | 8           |
| 10                      | Precision .....             | 8           |
| 11                      | Test report .....           | 8           |
| Bibliography .....      |                             | 9           |

## European foreword

This document (EN 13523-23:2015) has been prepared by Technical Committee CEN/TC 139 "Paints and varnishes", the secretariat of which is held by DIN.

This document supersedes EN 13523-23:2002.

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 January 2016, and conflicting national standards shall be withdrawn at the latest by January 2016.

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.

The main technical changes are:

- a) the title and scope was changed from colour stability to resistance;
- b) the assessment of changes was added in Clause 8.

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*
- *Part 16: Resistance to abrasion*

**EN 13523-23:2015 (E)**

- *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)*

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## **Introduction**

Previous work by the European Coil Coating Association (ECCA) has established that this test method is not a reliable or reproducible test for assessing the degree of corrosion on coil coated products, but that the test method may be used to evaluate the colour fastness of coil coated products.

The procedure has been aligned with EN ISO 3231, except for the amount of sulfur dioxide.

## 1 Scope

This part of EN 13523 defines terms of the procedure for determining the resistance of an organic coating on a metallic substrate to humid atmospheres containing sulfur dioxide.

## 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 13523-0, *Coil coated metals - Test methods - Part 0: General introduction*

EN 13523-3, *Coil coated metals - Test methods - Part 3: Colour difference - Instrumental comparison*

EN 13523-22, *Coil coated metals - Test methods - Part 22: Colour difference - Visual comparison*

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

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**

NOTE Some typical designs of apparatus are shown in EN ISO 3231:1997, Figures 1 and 2.