Coil coated metals - Test methods - Part 27: Resistance to humid poultice (Cataplasm test)



# EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 13523-27:2017 sisaldab Euroopa standardi EN 13523-27:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 13523-27:2017 consists of the English text of the European standard EN 13523-27:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.04.2017.	Date of Availability of the European standard is 05.04.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

# ICS 25.220.60

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht <a href="www.evs.ee">www.evs.ee</a>; telefon 605 5050; e-post <a href="mailto:info@evs.ee">info@evs.ee</a>

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

# **EUROPEAN STANDARD** NORME EUROPÉENNE

# EN 13523-27

**EUROPÄISCHE NORM** 

April 2017

ICS 25.220.60

Supersedes EN 13523-27:2009

## **English Version**

# Coil coated metals - Test methods - Part 27: Resistance to humid poultice (Cataplasm test)

Tôles prélaquées - Méthodes d'essai - Partie 27 : Résistance à la corrosion sous cataplasme (essai au cataplasme)

Bandbeschichtete Metalle - Prüfverfahren - Teil 27: Beständigkeit gegen feuchte Verpackung (Kataplasma-

This European Standard was approved by CEN on 18 December 2016.

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, Serbia, 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

Lon	tents		Page
Euro	nean foreword		3
1			
2	•		
3			
ļ			
;			
	<del></del>		
'.1 '.2	Exposure		7
3.1 3.2	Overall surface (flat test su Edges	urface)	
)	Test report		8
ibli	ography		9
2			

# **European foreword**

This document (EN 13523-27:2017) 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 2017, and conflicting national standards shall be withdrawn at the latest by October 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13523-27:2009.

The main changes are:

- a) the description of the buffer solution was amended;
- b) the text has been revised editorially and the normative references have been updated.

The EN 13523 series, *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
- 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 (Cataplasm 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

# 1 Scope

This part of the EN 13523 series specifies a procedure for evaluating the resistance of an organic coating on a metallic substrate (coil coating) in conditions of extreme humidity (acid, alkaline and/or neutral).

#### 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 ISO 4628-2, Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 2: Assessment of degree of blistering (ISO 4628-2)

EN ISO 4628-3, Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 3: Assessment of degree of rusting (ISO 4628-3)

EN ISO 4628-5, Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 5: Assessment of degree of flaking (ISO 4628-5)

EN ISO 4628-10, Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 10: Assessment of degree of filiform corrosion (ISO 4628-10, Corrected version 2016-06-01)

#### 3 Terms and definitions

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

# 4 Principle

A test specimen is exposed to an enclosed humid environment for a pre-determined time, at a specified temperature. The test panel is evaluated for any uniform or local change such as blistering or corrosion (e.g. red rust, white rust).

# 5 Apparatus and materials

- **5.1 Purified absorbent cotton-wool,** single layer, of rectangular shape of about 250 mm  $\times$  650 mm and weighing (22,5 ± 2,5) g.
- **5.2** Heat resistant and thermally sealable waterproof plastics bag and the relevant sealing equipment.

The plastics bag can be made of polyethylene, for example, and should be at least 0,22 mm thick.