

## **Coil coated metals - Test methods - Part 12: Resistance to scratching**

Coil coated metals - Test methods - Part 12:  
Resistance to scratching

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13523-12:2005 sisaldab Euroopa standardi EN 13523-12:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13523-12:2005 consists of the English text of the European standard EN 13523-12:2004.</p> <p>This document is endorsed on 25.01.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This Part of EN 13523 describes the procedure for determining the resistance of an organic coating on a metallic substrate to penetration by scratching with a needle. It is possible that with some aluminium alloys and thin gauge steel substrate below 0,4 mm, that rather than scratching, the needle will deform the substrate. Under these conditions this test method is not applicable. Soft coatings such as poly vinyl chloride (PVC) and structured coatings will not give a precise result due to the soft nature of the coating and/or the potential for the needle to snag. The method is not applicable to conductive coatings.</p>	<p><b>Scope:</b></p> <p>This Part of EN 13523 describes the procedure for determining the resistance of an organic coating on a metallic substrate to penetration by scratching with a needle. It is possible that with some aluminium alloys and thin gauge steel substrate below 0,4 mm, that rather than scratching, the needle will deform the substrate. Under these conditions this test method is not applicable. Soft coatings such as poly vinyl chloride (PVC) and structured coatings will not give a precise result due to the soft nature of the coating and/or the potential for the needle to snag. The method is not applicable to conductive coatings.</p>
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English version

## Coil coated metals - Test methods - Part 12: Resistance to scratching

Tôles prélaquées - Méthodes d'essais - Partie 12:  
Résistance à la rayure

Bandbeschichtete Metalle - Prüfverfahren - Teil 12:  
Widerstand gegen Ritzen

This European Standard was approved by CEN on 23 September 2004.

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## Foreword

This document (EN 13523-12:2004) 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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

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

## 1 Scope

This part of EN 13523 describes the procedure for determining the resistance of an organic coating on a metallic substrate to penetration by scratching with a needle.

It is possible that with some aluminium alloys and thin gauge steel substrate below 0,4 mm, that rather than scratching, the needle will deform the substrate. Under these conditions this test method is not applicable.

Soft coatings such as poly vinyl chloride (PVC) and structured coatings will not give a precise result due to the soft nature of the coating and/or the potential for the needle to snag.

The method is not applicable to conductive coatings.

## 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)*.

EN ISO 1518, *Paints and varnishes — Scratch test (ISO 1518:1992)*.

## 3 Terms and definitions

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

## 4 Principle

The organic coating is tested by mechanical means whereby a test panel is dragged beneath a needle upon which a specified load is placed.