

**Aerospace series - Paints and  
varnishes - Test method for  
determination of infrared reflectance**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 4592:2006 sisaldab Euroopa standardi EN 4592:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 24.11.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 4592:2006 consists of the English text of the European standard EN 4592:2006.</p> <p>This document is endorsed on 24.11.2006 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> This standard specifies the method of test for determining the infrared reflectance of paints and varnishes. The test procedure determines the amount of energy reflected by the material in the range of wavelengths between 700 nanometres and 2 400 nanometres with respect to that of a standard reflectance material. The procedure is applicable to products intended for use in aerospace applications.</p>	<p><b>Scope:</b> This standard specifies the method of test for determining the infrared reflectance of paints and varnishes. The test procedure determines the amount of energy reflected by the material in the range of wavelengths between 700 nanometres and 2 400 nanometres with respect to that of a standard reflectance material. The procedure is applicable to products intended for use in aerospace applications.</p>
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ICS 49.040

Võtmesõnad:

ICS 49.040

English Version

## Aerospace series - Paints and varnishes - Test method for determination of infrared reflectance

Série aérospatiale - Peintures et vernis - Méthode d'essai  
pour réflectance infrarouge

Luft- und Raumfahrt - Anstrichstoffe - Prüfmethode zur  
Messung der Infrarotremission

This European Standard was approved by CEN on 21 July 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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 United Kingdom.



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## Foreword

This document (EN 4592:2006) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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 April 2007, and conflicting national standards shall be withdrawn at the latest by April 2007.

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.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This standard specifies the method of test for determining the infrared reflectance of paints and varnishes.

The test procedure determines the amount of energy reflected by the material in the range of wavelengths between 700 nanometres and 2 400 nanometres with respect to that of a standard reflectance material.

The procedure is applicable to products intended for use in aerospace applications.

## 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.

ISO 1513, *Paints and varnishes — Examination and preparation of samples for testing.*

ISO 2808, *Paints and varnishes — Determination of film thickness.*

ISO 3270, *Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing.*

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling.*

## 3 Terms and definitions

For the purposes of this standard, the following definitions apply.

### 3.1

#### **infrared reflectance**

the proportion of the energy reflected by a specimen in relation to a defined standard material

## 4 Principle

The reflectance of a specimen comprising a coated test panel is measured against that of reflectance standard in the 700 nm to 2 400 nm wavelength range.

## 5 Apparatus

A recording spectrophotometer fitted with an integrating sphere which will meet the following requirements unless otherwise specified or agreed (see Table 1).