

## **Aerospace series - Elements of electrical and optical connection - Test methods - Part 515: Hydrolytic stability**

Aerospace series - Elements of electrical and optical  
connection - Test methods - Part 515: Hydrolytic  
stability

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 2591-515:2005 sisaldab Euroopa standardi EN 2591-515:2005 ingliskeelset teksti.	This Estonian standard EVS-EN 2591-515:2005 consists of the English text of the European standard EN 2591-515:2005.
Käesolev dokument on jõustatud 28.12.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 28.12.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

<b>Käsitlusala:</b> This standard specifies a test method for determination of the relative rate of absorption of water by plastic or composite material.	<b>Scope:</b> This standard specifies a test method for determination of the relative rate of absorption of water by plastic or composite material.
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**ICS** 49.060

**Võtmesõnad:** absorption, aerospace transport, air transport, aircraft components, fasteners

ICS 49.060

English Version

Aerospace series - Elements of electrical and optical connection  
- Test methods - Part 515: Hydrolytic stability

Série aérospatiale - Organes de connexion électrique et  
optique - Méthodes d'essais - Partie 515 : Stabilité  
hydrolytique

Luft- und Raumfahrt - Elektrische und optische  
Verbindungselemente - Prüfverfahren - Teil 515:  
Hydrolytische Stabilität

This European Standard was approved by CEN on 19 September 2005.

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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.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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## Foreword

This European Standard (EN 2591-515:2005) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-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 AECMA, 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 2006, and conflicting national standards shall be withdrawn at the latest by April 2006.

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.

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## 1 Scope

This standard specifies a test method for determination of the relative rate of absorption of water by plastic or composite material.

It's derived from ASTM D 570 - 98 and it shall be used together with EN 2591-100.

## 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 2591-100, *Aerospace series – Elements of electrical and optical connection – Test methods – Part 100: General.*

EN 2591-101, *Aerospace series – Elements of electrical and optical connection – Test methods – Part 101: Visual examination.*

ASTM D 570 – 98, *Standard Test Method for Water Absorption of Plastics.* <sup>1)</sup>

## 3 Preparation of specimens

According to technical specification of product.

## 4 Details

Method: A, B or C.

Maximum percentage increased weight and/or soluble material lost.

## 5 Test method

Three different test methods can be used according to the product standard requirement.

### 5.1 Conditioning

The specimen shall be dried in an oven for 24 h at  $(50 \pm 3)$  °C, cooled in a desiccator and immediately weighed to the nearest 0,001 g.

### 5.2 Method A: Long-term immersion to determine the total water absorbed when substantially saturated

The conditioned specimens shall be placed in a container of distilled water maintained at temperature of  $(23 \pm 1)$  °C, and shall rest on edge and be entirely immersed. At the end of 24 h they shall be removed from the water, wiped free of surface moisture with a dry cloth, weighed to the nearest 0,001 g immediately, and then replaced in the water. The weightings shall be repeated at the end of the first week and every two weeks thereafter until the increase in weight per two-week period, as shown by three consecutive weightings,

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