

Aerospace series - Flammability of non-metallic materials - Part 2: Small burner test, horizontal - Determination of the horizontal flame propagation

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 3844-2:2019 sisaldab Euroopa standardi EN 3844-2:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 3844-2:2019 consists of the English text of the European standard EN 3844-2:2019.
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 28.08.2019.	Date of Availability of the European standard is 28.08.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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EUROPEAN STANDARD

**EN 3844-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

**Aerospace series - Flammability of non-metallic materials -  
Part 2: Small burner test, horizontal - Determination of the  
horizontal flame propagation**

Série aérospatiale - Inflammabilité des matériaux non  
métalliques - Partie 2 : Essai au brûleur, horizontal -  
Détermination de la propagation horizontale de la  
flamme

Luft- und Raumfahrt - Entflammbarkeit  
nichtmetallischer Werkstoffe - Teil 2: Kleinbrenner-  
Prüfung, waagrecht - Bestimmung der waagerechten  
Flammenausbreitung

This European Standard was approved by CEN on 12 May 2019.

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.

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

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## European foreword

This document (EN 3844-2:2019) 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 February 2020, and conflicting national standards shall be withdrawn at the latest by February 2020.

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 3844-2:2011.

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

## 1 Scope

This document specifies the test method for the determination of the horizontal flame propagation of non-metallic materials when subjected to a small flame in part or in whole.

This test method is also used for testing non-metallic materials which have to meet the test criteria for the horizontal Bunsen burner test.

It is used for evaluation of non-metallic materials or constructions used in the interiors of aerospace vehicles but also may be used in other applications as specified in applicable procurement and regulatory documents.

This standard should be used to measure and describe the properties of non-metallic materials, products or assemblies in response to heat and flame under controlled laboratory conditions and should not be used to describe or appraise the fire hazard or fire risk of materials, products, or assemblies under actual fire conditions. However results of this test may be used as elements of a fire risk assessment which takes into account all of the factors which are pertinent to an assessment of the fire hazard of a particular end use.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ASTM-D 5025, *Standard Specification for Laboratory Burner Used for Small-Scale Burning Tests on Plastic Materials* <sup>1)</sup>

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 3.1

#### **flame spread rate**

distance travelled by a flame front during its propagation, per unit time, under specified test conditions

Note 1 to entry: In this test, it is the speed with which a flame front moves across a test specimen mounted horizontally. The flame spread rate is expressed in mm per minutes.

### 3.2

#### **time of flame application**

length of time the burner flame is applied to the specimen

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1) Published by: ASTM National (US) American Society for Testing and Materials <http://www.astm.org/>.