BS EN 3844-3:2019

BSI Standards Publication

Aerospace series — Flammability of non-metallic materials

Part 3: Small burner test, 45° — Determination of the resistance of material to flame and glow propagation and to flame penetration

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National foreword

This British Standard is the UK implementation of EN 3844-3:2019. It supersedes BS EN 3844-3:2011, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ACE/65, Non-metallic materials for aerospace purposes.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

Aerospace series - Flammability of non-metallic materials - Part 3: Small burner test, 45° - Determination of the resistance of material to flame and glow propagation and to flame penetration

Série aérospatiale - Inflammabilité des matériaux non métalliques - Partie 3 : Essai au brûleur, 45° - Détermination de la résistance du matériau à la propagation de la flamme et de l'incandescence, et à la pénétration de la flamme

Luft- und Raumfahrt - Entflammbarkeit nichtmetallischer Werkstoffe - Teil 3: Kleinbrenner-Prüfung, 45° - Bestimmung der Beständigkeit eines Materials gegen die Ausbreitung von Flammen und Glimmen und gegen Durchbrennen

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

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 3844-3:2019) 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of an identical text or by endorsement, at the latest by February 2020, and conflicting national standards shall be withdrawn at the latest by February 2020.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 3844-3:2011.

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1 Scope

This document specifies the test for the determination of the resistance of non-metallic materials in part or in whole to flame and glow propagation and to flame penetration.

This test method is also used for testing non-metallic materials which have to meet the test criteria for the 45° 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* [1)]

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
time of flame application
length of time the burner flame is applied to the specimen

3.2
after flame time
time in seconds for which the specimen continues to flame after the burner flame has been removed from the specimen

Note 1 to entry: The time is expressed in seconds.

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

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