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NSAI Standards

Irish Standard
I.S. EN 16602-70-21:2014

Space product assurance - Flammability testing for the screening of space materials

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EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 16602-70-21

October 2014

ICS 13.220.40; 49.025.01; 49.140

Supersedes EN 14090:2002

English version

Space product assurance - Flammability testing for the screening of space materials

Assurance produit des projets spatiaux - Essai de flammabilité pour la sélection des matériaux d'un projet spatial

Raumfahrtproduktsicherung - Brennverhaltenstest für die Auswahl von Raumfahrtmaterialien

This European Standard was approved by CEN on 11 April 2014.

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Foreword

This document (EN 16602-70-21:2014) has been prepared by Technical Committee CEN/CLC/TC 5 “Space”, the secretariat of which is held by DIN.

This standard (EN 16602-70-21:2014) originates from ECSS-Q-ST-70-21C.

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of an identical text or by endorsement, at the latest by April 2015, and conflicting national standards shall be withdrawn at the latest by April 2015.

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.

This document supersedes EN 14090:2002.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document has been developed to cover specifically space systems and has therefore precedence over any EN covering the same scope but with a wider domain of applicability (e.g. : aerospace).

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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1 Scope

This Standard defines a multi-test procedure for the determination of the flammability characteristics of non-metallic materials under a set of closely controlled conditions. The test procedure covers both individual materials and materials used in configuration. This Standard describes a series of tests to provide data for aid in the evaluation of the suitability of materials for use in a space vehicle crew compartment. The data obtained are in respect to the ease of ignition and the flame propagation characteristics of materials.

All non-metallic materials are inherently flammable, the degree to which this is true is dependant on the chemical nature of the material itself and the environment to which the material is exposed. In the closed environment of a manned spacecraft this can lead to a potentially dangerous situation and close control is therefore required.

This standard may be tailored for the specific characteristics and constrains of a space project in conformance with ECSS-S-ST-00.

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