



**NSAI**  
Standards

Irish Standard  
I.S. EN 16602-70-29:2014

# Space product assurance - Determination of offgassing products from materials and assembled articles to be used in a manned space vehicle crew compartment

**I.S. EN 16602-70-29:2014**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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English version

## Space product assurance - Determination of offgassing products from materials and assembled articles to be used in a manned space vehicle crew compartment

Assurance produit des projets spatiaux - Détermination des  
produits de dégazage sous atmosphère pour les matériaux  
et éléments assemblés utilisés dans le poste d'équipage du  
satellite habité

Raumfahrtproduktsicherung - Bestimmung der Abgabe von  
Fremdstoffen durch Werkstoffe und Bauteile im  
Mannschaftsraum von Raumfahrzeugen

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

CEN and CENELEC 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 and CENELEC 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 and CENELEC 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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## Foreword

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This document (EN 16602-70-29:2014) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16602-70-29:2014) originates from ECSS-Q-ST-70-29C.

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of an identical text or by endorsement, at the latest by April 2015, and conflicting national standards shall be withdrawn at the latest by April 2015.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 14100:2001.

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.

# 1

## Scope

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All non-metallic materials release trace contaminants into the surrounding environment; the extent to which this occurs is dependent on the nature of the material concerned. In the closed environment of a manned spacecraft contaminants within the atmosphere are potentially dangerous with respect to toxicity and its consequences for the safety of the crew.

This Standard defines a test procedure for the determination of the trace contaminants release by non-metallic materials under a set of closely controlled conditions. The test procedure covers both individual materials and assembled articles.

In this Standard the supplier means the testing authority that is responsible for specifying and executing the offgassing tests.

This Standard describes a test to provide data for aid in the evaluation of the suitability of assembled articles and materials for use in a space vehicle crew compartment. The data obtained are in respect of the nature and quantity of organic and inorganic volatile contaminants evolved when subjected to the crew compartment environment.

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

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