

Zabezpečovanie výrobkov kozmického programu. Zisťovanie plynných látok, ktoré sa uvoľňujú z výrobkov a zmontovaných dielcov určených na používanie v priestoroch posádky kozmických lodí.

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

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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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.

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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 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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Table of contents

Forew	ord		4		
1 Scop	oe		5		
2 Norn	native r	references	6		
3 Term	ns. defi	nitions and abbreviated terms	7		
3.1		defined in other standards			
3.2	Terms specific to the present standard				
3.3	Abbreviated terms				
3.4	Formu	Formula for conversion			
4 Requ	uiremer	າts	9		
4.1	Preparatory conditions				
	4.1.1	Test specimen preparation	9		
	4.1.2	Cleaning	11		
	4.1.3	Identification	11		
4.2	Test facility				
	4.2.1	General requirements	11		
	4.2.2	Test chamber	11		
	4.2.3	Sampling equipment	12		
	4.2.4	Analytical equipment	12		
	4.2.5	Resolution (Static): at the slit settings provided, the resolution definition (10 % valley) is within the values listed in Gas supplies	13		
	4.2.6	Gas supplies	13		
4.3	Test chamber certification procedure		13		
4.4	Test procedure				
	4.4.1	Test conditions	14		
	4.4.2	Test execution	14		
	4.4.3	Analysis of samples	15		
4.5	Acceptance limits				
	4.5.1	Materials	15		
	4.5.2	Assembled articles, experiments and racks	15		
4.6	Quality assurance				
	4.6.1	Data	16		

EN 16602-70-29:2014 (E)

	4.6.2	Calibration	16
Anne	x A (nor	mative) Offgassing evaluation report - DRD	17
Anne	x B (info	ormative) Example of test method procedure	19
Biblio	ography.		21
Table	es		
Table	4-1: Slits	setting	13

Foreword

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

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 constrains of a space project in conformance with ECSS-S-T-00.

Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this ECSS Standard. For dated references, subsequent amendments to, or revision of any of these publications do not apply, However, parties to agreements based on this ECSS Standard are encouraged to investigate the possibility of applying the more recent editions of the normative documents indicated below. For undated references, the latest edition of the publication referred to applies.

EN reference	Reference in text	Title
EN 16601-00-01	ECSS-S-ST-00-01	ECSS system – Glossary of terms
EN 16602-10-09	ECSS-Q-ST-10-09	Space product assurance – Nonconformance control system
EN 16602-70	ECSS-Q-ST-70	Space product assurance – Materials, mechanical parts and processes

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