



SLOVENSKI STANDARD
SIST EN 16602-70-22:2015
01-januar-2015

Nadomešča:
SIST EN 14089:2004

Zagotavljanje varnih proizvodov v vesoljski tehniki - Nadzor materialov z omejeno življenjsko dobo skladiščenja

Space product assurance - Control of limited shelf-life materials

Raumfahrtproduktsicherung - Kontrolle von Materialien mit begrenzter Lagerfähigkeit

Assurance produit des projets spatiaux - Contrôle des équipements à durée de vie limitée sur étagère

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ICS:

49.025.01	Materiali za letalsko in vesoljsko gradnjo na splošno	Materials for aerospace construction in general
49.140	Vesoljski sistemi in operacije	Space systems and operations

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en

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English version

Space product assurance - Control of limited shelf-life materials

Assurance produit des projets spatiaux - Contrôle des équipements à durée de vie limitée sur étagère

Raumfahrtproduktsicherung - Kontrolle von Materialien mit begrenzter Lagerfähigkeit

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

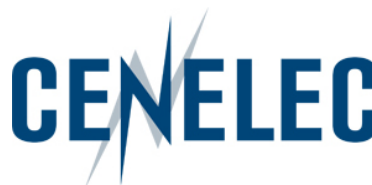
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Table of contents

Foreword	3
1 Scope	4
2 Normative references	5
3 Terms, definitions and abbreviated terms	6
3.1 Terms defined in other standards	6
3.2 Terms specific to the present standard	6
3.3 Abbreviated terms.....	6
4 Requirements	7
4.1 Control of material life	7
4.1.1 Hazards, health and safety precautions	7
4.1.2 Material control	7
4.1.3 Assessment of shelf-life	8
4.1.4 Extension of shelf-life (re-certification).....	9
4.1.5 Disposal of materials.....	9
4.1.6 Acceptance criteria, re-certification testing	9
4.2 Quality assurance.....	9
4.2.1 Data	9
4.2.2 Calibration.....	10
Annex A (normative) Shelf-life material evaluation report - DRD	11
Annex B (informative) Examples of properties to be measured	12
Bibliography	13

Foreword

This document (EN 16602-70-22:2014) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN.

This standard (EN 16602-70-22:2014) originates from ECSS-Q-ST-70-22C.

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 14089:2002.

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.

1

Scope

Several classes of materials depend on a chemical reaction for their application and their final properties are sensitive to the exact composition of the reactants. The final properties vary with the reactants' age and storage condition.

This Standard defines the requirements for the identification, handling, storage and control of limited shelf-life materials employed in the fabrication of spacecraft and associated equipment.

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

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2

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 16602-40	ECSS-Q-ST-40	Space product assurance - Safety
EN 16602-70	ECSS-Q-ST-70	Space product assurance - Materials, mechanical parts and processes

Terms, definitions and abbreviated terms

3.1 Terms defined in other standards

For the purpose of this Standard, the terms and definitions from ECSS-S-ST-00-01 and ECSS-Q-ST-70 apply.

3.2 Terms specific to the present standard

3.2.1 batch

quantity produced at one operation

NOTE One batch can be subdivided into several lots.

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3.2.2 shelf-life

period of time during which a material can be processed to produce final properties with consistently stable parameters

3.3 Abbreviated terms

For the purpose of this Standard, the abbreviated terms from ECSS-S-ST-00-01 and the following apply:

Abbreviation	Meaning
RH	relative humidity

4 Requirements

4.1 Control of material life

4.1.1 Hazards, health and safety precautions

- a. Materials and parts with hazardous characteristics shall be identified and manage in conformance with the "Safety programme plan" specified in ECSS-Q-ST-40.
- b. Procedures to control hazards, health and safety to personnel, equipment or materials shall be defined and implemented.

4.1.2 Material control

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4.1.2.1 Procurement document

- a. For procurement specifications and purchase orders, the date of manufacture, storage conditions and shelf-life of the products shall be declared.

4.1.2.2 Identification

- a. Materials shall be labelled with the shelf-life and the date of the beginning of life or the date of manufacture (see clause 4.1.3).

NOTE In some critical applications, the project can reduce the shelf-life as originally stated by the manufacturer or supplier in order to meet particularly stringent product assurance requirements.

- b. For quantities which are split from a batch, it shall be ensured that materials are fully traceable to it and bear the same date and life indications.

4.1.2.3 Storage

- a. Materials shall be stored in a nominally clean area at (22 ± 3) °C with a relative humidity of (55 ± 10) % unless specified otherwise by the manufacturer or supplier.