



SLOVENSKI STANDARD
kSIST FprEN 16602-70-22:2014
01-februar-2014

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

Ta slovenski standard je istoveten z: FprEN 16602-70-22

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

kSIST FprEN 16602-70-22:2014 **en**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

FINAL DRAFT
FprEN 16602-70-22

October 2013

ICS 49.025.01; 49.140

Will supersede EN 14089:2002

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 draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/CLC/TC 5.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN and CENELEC 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.

CEN and CENELEC members are the national standards bodies and national electrotechnical committees of 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 United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



**CEN-CENELEC Management Centre:
Avenue Marnix 17, B-1000 Brussels**

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 (FprEN 16602-70-22:2013) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN (Germany).

This document (FprEN 16602-70-22:2013) originates from ECSS-Q-ST-70-22C.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 14089:2002.

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

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.

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.

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