

SLOVENSKI STANDARD
oSIST prEN IEC 62321-14:2025
01-april-2025

Določevanje posameznih snovi v elektrotehničnih izdelkih - 14. del: Določevanje kloriranih parafinov (SCCP) s kratko verigo in kloriranih parafinov s srednje dolgo verigo (MMCCP) v elektrotehničnih izdelkih s plinsko kromatografijo - negativno kemijsko ionizacijo - masno spektrometrijo (GC-NCI-MS)

Determination of certain substances in electrotechnical products - Part 14: Determination of short-chain chlorinated paraffins (SCCPs) and medium-chain chlorinated paraffins (MCCPs) in electrotechnical products by gas chromatography-negative chemical ionization-mass spectrometry (GC-NCI-MS)

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DÉTERMINATION DE CERTAINES SUBSTANCES DANS LES PRODUITS ÉLECTROTECHNIQUES - Partie 14: Détermination des paraffines chlorées à chaîne courte (PCCC) et des paraffines chlorées à chaîne moyenne (PCCM) dans des produits électrotechniques par chromatographie en phase gazeuse couplée à la spectrométrie de masse avec ionisation chimique négative (GC-NCI-MS)

Ta slovenski standard je istoveten z: prEN IEC 62321-14:2025

ICS:

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43.040.10	Električna in elektronska oprema	Electrical and electronic equipment

oSIST prEN IEC 62321-14:2025 **en**



111/802/CDV

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IEC TC 111 : ENVIRONMENTAL STANDARDIZATION FOR ELECTRICAL AND ELECTRONIC PRODUCTS AND SYSTEMS	
SECRETARIAT: Italy	SECRETARY: Mr Alfonso Sturchio
OF INTEREST TO THE FOLLOWING COMMITTEES: TC 2,TC 9,TC 18,TC 20,TC 21,TC 23,TC 34,SC 34D,TC 59,TC 62,SC 65B,TC 80,TC 82,TC 88,TC 91,TC 100,TC 110,TC 121,TC 124,TC 125	HORIZONTAL FUNCTION(S): TC 111 Horizontal Basic Environment - Assessment
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<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

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TITLE:

**DETERMINATION OF CERTAIN SUBSTANCES IN ELECTROTECHNICAL PRODUCTS – Part 14:
Determination of short-chain chlorinated paraffins (SCCPs) and medium-chain chlorinated paraffins (MCCPs) in electrotechnical products by gas chromatography-negative chemical ionization-mass spectrometry (GC-NCI-MS)**

PROPOSED STABILITY DATE: 2029

NOTE FROM TC/SC OFFICERS:

TC 111 WG 3 confirmed that this CDV document met the two criteria to skip the second IIS approved by NCs (111/777/RQ).

- The first IIS is performed according to the IIS minimum requirements
- There are no significant technical changes in the standard

Based on the agreement at the TC 111 WG 3 meeting held on November 12, 2024, in Okayama, the CDV will be circulated.

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CONTENTS

1		
2		
3	FOREWORD	5
4	INTRODUCTION	7
5	1 Scope	8
6	2 Normative references	8
7	3 Terms, definitions and abbreviated terms	8
8	3.1 Terms and definitions	8
9	3.2 Abbreviated terms	9
10	4 Principle	9
11	5 Reagents and materials	9
12	6 Apparatus	10
13	7 Sampling	10
14	8 Procedure	10
15	8.1 Sample preparation	10
16	8.2 Instrumental parameters	11
17	8.3 Calibrants	12
18	8.4 Calibration	12
19	9 Calculation of SCCPs and MCCPs concentration	14
20	9.1 General	14
21	9.2 Calculation	14
22	10 Precision	16
23	11 Quality assurance and quality control	17
24	11.1 Performance	17
25	11.2 Method detection limit and reporting limit	18
26	12 Test report	18
27	Annex A (informative) Additional GC-NCI-MS conditions	19
28	Annex B (normative) Integration with Peak Shape Evaluation (PSE)	20
29	Annex C (informative) Results of international interlaboratory study of Pre-IIS (Pre-IIS14- SCCP&MCCP)	23
30		
31	Bibliography	24
32		
33	Figure B.1 – SCCPs standard 59 % Chlorides, different ion traces	20
34	Figure B.2 – Examples for matching samples compared with SCCPs standard 59 % Chlorides, upper chromatogram standard, lower chromatogram sample	21
35		
36	Figure B.3 – Examples for partly matched samples compared with SCCPs standard 59 % Chlorides, upper chromatogram standard, lower chromatogram sample	21
37		
38	Figure B.4 – MCCPs standard 55 % Chlorides, different ion traces	21
39	Figure B.5 – Examples for matching samples compared with MCCPs standard 55 % Chlorides, upper chromatogram standard, lower chromatogram sample	22
40		
41	Figure B.6 – Examples for partly matched samples compared with MCCPs standard 55 % Chlorides, upper chromatogram standard, lower chromatogram sample	22
42		

43		
44	Table 1. Mass for quantification and qualification of SCCPs and MCCPs.....	11
45	Table 2 – Commercially available SCCPs and MCCPs reference material considered suitable	
46	for this analysis	12
47	Table 3 – Example mixing ratio of SCCPs 59 % Chlorides content and MCCPs 55 % Chlorides	
48	content.....	13
49	Table 4 – Pre-IIS 14 repeatability and reproducibility for SCCPs	16
50	Table 5 – Pre-IIS 14 repeatability and reproducibility for MCCPs.....	16
51	Table A.1 – Instrument parameters for GC-NCI-MS.....	19
52	Table C.1 – Statistical data for GC-NCI-MS.....	23
53		
54		

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**DETERMINATION OF CERTAIN SUBSTANCES
IN ELECTROTECHNICAL PRODUCTS –**
**Part 14: Short-chain chlorinated paraffins (SCCPs) and medium-chain
chlorinated paraffins (MCCPs) in plastics by gas chromatography-negative
chemical ionization-mass spectrometry (GC-NCI-MS)**

FOREWORD

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International Standard IEC 62321-14 has been prepared by IEC technical committee 111: Environmental standardization for electrical and electronic products and systems.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
XX/XX/XXX	XX/XX/XXX

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

103 The committee has decided that the contents of this document will remain unchanged until the stability
104 date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific
105 document. At this date, the document will be

- 106 – reconfirmed,
- 107 – withdrawn,
- 108 – replaced by a revised edition, or
- 109 – amended.

110 The National Committees are requested to note that for this document the stability date is 20XX..

111 THIS TEXT IS INCLUDED FOR THE INFORMATION OF THE NATIONAL COMMITTEES AND WILL BE DELETED AT THE
112 PUBLICATION STAGE.

113

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114 INTRODUCTION

115 The widespread use of electrotechnical products has drawn increased attention to their impact on the
116 environment. In many countries this has resulted in the adoption of regulations affecting wastes,
117 substances and energy use of electrotechnical products.

118 The use of certain substances (e.g. lead (Pb), cadmium (Cd) and polybrominated diphenyl ethers
119 (PBDEs)) in electrotechnical products is a source of concern in current and proposed regional legislation.

120 The purpose of the IEC 62321 series is therefore to provide test methods that will allow the
121 electrotechnical industry to determine the levels of certain substances of concern in electrotechnical
122 products on a consistent global basis.

123 This first edition of IEC 62321-14 introduces a new subject covering short-chain chlorinated paraffins
124 (SCCPs) and medium-chain chlorinated paraffins (MCCPs) in the IEC 62321 series.

125 **WARNING** — Persons using this International Standard should be familiar with normal laboratory
126 practice. This International Standard does not purport to address all of the safety problems, if any,
127 associated with its use. It is the responsibility of the user to establish appropriate safety and health
128 practices and to ensure compliance with any national regulatory conditions.

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DETERMINATION OF CERTAIN SUBSTANCES IN ELECTROTECHNICAL PRODUCTS –

Part 14: Short-chain chlorinated paraffins (SCCPs) and medium-chain chlorinated paraffins (MCCPs) in plastics by gas chromatography-negative chemical ionization-mass spectrometry (GC-NCI-MS)

1 Scope

This part of IEC 62321 specifies one technique for the determination of short-chain and medium-chain chlorinated paraffins (SCCPs: C10-C13 and MCCPs: C14-C17) in plastics of electrotechnical products.

This standard specifies a quantitative method for the determination of short-chain and medium-chain chlorinated paraffins in electrotechnical products by means of solvent extraction and gas chromatography-negative chemical ionization-mass spectrometry (GC-NCI-MS).

This test method has been evaluated for use with ABS (acrylonitrile butadiene styrene) and PVC (polyvinyl chloride) containing individual SCCPs ranging from 369,7 mg/kg to 8653,9 mg/kg and MCCPs ranging from 2184 mg/kg to 27 329,6 mg/kg.

This standard is primarily intended for use by technical committees in the preparation of standards in accordance with the principles laid down in IEC Guide 108.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62321-1:2013, *Determination of certain substances in electrotechnical products – Part 1: Introduction and overview*

IEC 62321-2, *Determination of certain substances in electrotechnical products – Part 2: Disassembly, disjointment and mechanical sample preparation*

ISO 3696, *Water for analytical laboratory use – Specification and test methods*

ISO 4787, *Laboratory glassware — Volumetric instruments — Methods for testing of capacity and for use*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions provided in IEC 62321-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

IEC Electropedia: available at <http://www.electropedia.org/>

ISO Online browsing platform: available at <http://www.iso.org/obp>