

SLOVENSKI STANDARD SIST EN 60754-1:2014

01-junij-2014

Nadomešča:

SIST EN 50267-1:1999 SIST EN 50267-2-1:1999 SIST EN 50267-2-2:1999 SIST EN 50267-2-3:1999

Ugotavljanje nastajanja plinov pri gorenju kabelskih materialov - 1. del: Ugotavljanje količine plina halogenske kisline (IEC 60754-1:2011)

Test on gases evolved during combustion of materials from cables. Part 1: Determination of the halogen acid gas content siteh.ai)

Prüfung der bei der Verbrennung der Werkstöffe von Kabeln und isolierten Leitungen entstehenden Gase Prüfung des Gehaltes an Halogenwasserstoffsäure

Essai sur les gaz émis lors de la combustion des matériaux prélevés sur câbles -- Partie 1: Détermination de la quantité de gaz acide halogéné

Ta slovenski standard je istoveten z: EN 60754-1:2014

ICS:

13.220.40 Sposobnost vžiga in Ignitability and burning

obnašanje materialov in behaviour of materials and

proizvodov pri gorenju products

29.060.20 Kabli Cables

SIST EN 60754-1:2014 en

SIST EN 60754-1:2014

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60754-1:2014</u> https://standards.iteh.ai/catalog/standards/sist/8c2b5443-9c71-4cc0-a773-427e89f75332/sist-en-60754-1-2014

EUROPEAN STANDARD

EN 60754-1

NORME EUROPÉENNE EUROPÄISCHE NORM

April 2014

ICS 13.220.40; 29.020; 29.060.20

Supersedes EN 50267-1:1998 (partially), EN 50267-2-1:1998 (partially), EN 50267-2-2:1998 (partially), EN 50267-2-3:1998 (partially)

English version

Test on gases evolved during combustion of materials from cables - Part 1: Determination of the halogen acid gas content

(IEC 60754-1:2011 + corrigendum Nov. 2013)

Essai sur les gaz émis lors de la combustion des matériaux prélevés sur câbles - Partie 1: Détermination de la quantité

Partie 1: Détermination de la quantité de gaz acide halogéné (CEI 60754-1:2011 + corrigendum Nov. 2013)

Prüfung der bei der Verbrennung der Werkstoffe von Kabeln und isolierten Leitungen entstehenden Gase - Teil 1: Bestimmung des Gehaltes an Halogenwasserstoffsäure (IEC 60754-1:2011 + Corrigendum Nov. 2013)

iTeh STANDARD PREVIEW

(standards.iteh.ai)

This European Standard was approved by CENELEC on 2014-01-27. 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 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

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

Foreword

This document (EN 60754-1:2014) consists of the text of IEC 60754-1:2011 + corrigendum November 2013, prepared by IEC/TC 20 "Electric cables".

The following dates are fixed:

- latest date by which the document has to be (dop) 2015-01-27 implemented at national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the document have to be withdrawn

This document supersedes EN 50267-1:1998 (PART), EN 50267-2-1:1998 (PART), EN 50267-2-2:1998 (PART) and EN 50267-2-3:1998 (PART).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

iTeh STENDORED PREVIEW

The text of the International Standard IEC 60754-1:2011 of corrigendum November 2013 was approved by CENELEC as a European Standard without any modification.

SIST EN 60754-1:2014

In the official version, for Bibliography, ithe following note has to be added for the standard indicated:

427e89f75332/sist-en-60754-1-2014 Harmonized as EN 60684-2.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	<u>Year</u>
ISO 385	-	Laboratory glassware - Burettes	EN ISO 385	-
ISO 1042	-	Laboratory glassware - One-mark volumetric flasks	EN ISO 1042	-
ISO 3696	-	Water for analytical laboratory use - Specification and test methods	EN ISO 3696	-

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60754-1:2014 https://standards.iteh.ai/catalog/standards/sist/8c2b5443-9c71-4cc0-a773-427e89f75332/sist-en-60754-1-2014 **SIST EN 60754-1:2014**

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 60754-1:2014</u> https://standards.iteh.ai/catalog/standards/sist/8c2b5443-9c71-4cc0-a773-427e89f75332/sist-en-60754-1-2014



IEC 60754-1

Edition 3.0 2011-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

GROUP SAFETY PUBLICATION

PUBLICATION GROUPÉE DE SÉCURITÉ

Test on gases evolved during combustion of materials from cables – Part 1: Determination of the halogen acid gas content

Essai sur les gaz émis lors de la combustion des matériaux prélevés sur câbles – Partie 1: Détermination de la quantité de gaz acide halogéné

427e89f75332/sist-en-60754-1-2014

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE
CODE PRIX

S

ICS 13.220.40; 29.020; 29.060.20

ISBN 978-2-88912-715-3

CONTENTS

FΟ	REW	ORD		4
INT	ROD	UCTION	V	6
1	Scope			7
2	Norn	Normative references		
3	Term	Terms and definitions		
4	Test	method	l principle	8
5	Test	appara	tus	8
	5.1	• •	al	
	5.2		urnace	
	5.3	Quartz	z glass tube	8
	5.4	Comb	ustion boats	8
	5.5	Bubbli	ng devices for gases	9
	5.6	Air su	pply system	9
	5.7	•	ical balance	
	5.8		atory glassware	
	5.9	_	ents	
6			en	
	6.1		al iTeh STANDARD PREVIEW	
	6.2	Condi	tioning of specimen (Standards.iteh.ai) of specimen	10
_	6.3			
7		proced	ure <u>SIST EN 60754-1:2014</u>	11
	7.1		al https://standards.iteh.ai/catalog/standards/sist/8c2b5443-9c71-4cc0-a773-	
	7.2		pparatus and arrangement2/sist-en-60754-1-2014	
	7.3		g procedure	
		7.3.1 7.3.2	3 13 1	
	7.4		ng procedure	
	7.5		nination of halogen acid content	
	7.0	7.5.1	Blank test	
		7.5.2	Material test	
		7.5.3	Halogen acid content calculation	
8	Eval	uation c	of the test results	
9	Perf	ormance	e requirement	13
10				
Anı		•	ative) Determination of the halogen acid gas content of a sample	
			f a cable construction	20
Bib	liogra	phy		21
Fig	ure 1	– Devic	e for inserting combustion boat and test specimen	15
Fig	ure 2	– Exam	ple of a gas washing bottle	16
Fig	ure 3	– Test	apparatus: method 1 – Use of synthetic or compressed air from a	
			apparatus: method 2 – Use of laboratory compressed air supply	
_				

60754-1 @	EC:2011
-----------	---------

2	

Figure 5 – Test apparatus: method 3 – Use of ambient air sucked by means of a	
suction pump	19

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60754-1:2014

https://standards.iteh.ai/catalog/standards/sist/8c2b5443-9c71-4cc0-a773-427e89f75332/sist-en-60754-1-2014

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TEST ON GASES EVOLVED DURING COMBUSTION OF MATERIALS FROM CABLES –

Part 1: Determination of the halogen acid gas content

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter
- https://standards.itch.ai/catalog/standards/sist/8c2b5443-9c71-4cc0-a773
 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60754-1 has been prepared by IEC technical committee 20: Electric cables.

It has the status of a group safety publication in accordance with IEC Guide 104.

This third edition cancels and replaces the second edition, published in 1994, and constitutes a technical revision.

The significant technical changes with respect to the previous edition are as follows:

- improved definition of safety requirements relating to capture of gases and use of reagents;
- introduction of guidance on preparation of test specimens for a more even combustion;
- improvements to the procedure for establishing the heating regime;
- improved expression of tolerances and precision;

- 5 -

- definition of the procedure for the blank test;
- introduction of an informative annex giving details of a methodology for the determination of the halogen acid gas content of a sample representative of a cable construction.

The text of this standard is based on the following documents:

FDIS	Report on voting
20/1266/FDIS	20/1276/RVD

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

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

A list of all the parts in the IEC 60754 series, published under the general title Test on gases evolved during combustion of materials from cables, can be found on the IEC website.

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

- reconfirmed,
- withdrawn, withdrawn, iTeh STANDARD PREVIEW replaced by a revised edition, or
- (standards.iteh.ai) amended.

SIST EN 60754-1:2014 https://standards.iteh.ai/catalog/standards/sist/8c2b5443-9c71-4cc0-a773-427e89f75332/sist-en-60754-1-2014