Katsetused materjalide põlemisel kaablitest ja isoleerjuhtmetest eralduvatele gaasidele. Osa 2: Gaaside happesusastme (pH väärtuse mõõtmise teel) ja juhtivuse kindlaksmääramine

Test on gases evolved during combustion of materials from cables - Part 2: Determination of acidity (by pH measurement) and conductivity

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60754-2:2014 sisaldab Euroopa standardi EN 60754-2:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 60754-2:2014 consists of the English text of the European standard EN 60754-2:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 18.04.2014.	Date of Availability of the European standard is 18.04.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 13.220.40, 29.020, 29.060.20

EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 60754-2

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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 2: Determination of acidity (by pH measurement) and conductivity
(IEC 60754-2:2011)

Essai sur les gaz émis lors de la combustion des matériaux prélevés sur câbles -
Partie 2: Détermination de la conductivité et de l'acidité (par mesure du pH)
(CEI 60754-2:2011)

Prüfung der bei der Verbrennung der Werkstoffe von Kabeln und isolierten Leitungen entstehenden Gase -
Teil 2: Bestimmung der Azidität (durch Messung des pH-Wertes) und Leitfähigkeit
(IEC 60754-2:2011)

CENELEC

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

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Ref. No. EN 60754-2:2014 E

Foreword

This document (EN 60754-2:2014) consists of the text of IEC 60754-2:2011, prepared by IEC/TC 20 "Electric cables".

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-01-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-01-27

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

Endorsement notice

The text of the International Standard IEC 60754-2:2011 was approved by CENELEC as a European Standard without any modification.

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

IEC 60695-5-1	NOTE	Harmonized as EN 60695-5-1.

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.

Publication	Year	Title	EN/HD	Year
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	-

CONTENTS

FOREWORD 4
INTRODUCTION 6
1 Scope 7
2 Normative references 7
3 Terms and definitions 7
4 Test method principle 8
5 Test apparatus 8
5.1 General 8
5.2 Tube furnace 8
5.3 Quartz glass tube 8
5.4 Combustion boats 8
5.5 Bubbling devices for gases 9
5.6 Air supply system 9
5.7 Analytical balance 10
5.8 Laboratory glassware 10
5.9 pH meter 10
5.10 Conductivity measuring device 10
6 Test specimen 10
6.1 General 10
6.2 Conditioning of specimen 10
6.3 Mass of specimen 10
7 Test procedure 11
7.1 General 11
7.2 Test apparatus and arrangement 11
7.3 Heating procedure 11
7.4 Washing procedure 11
7.5 Determination of the pH value and conductivity 11
8 Evaluation of the test results 12
8.1 General method 12
8.2 Simplified method 12
8.3 Weighted values 12
8.3.1 Value of pH 12
8.3.2 Conductivity 13
9 Performance requirement 13
10 Test report 13
Annex A (informative) Recommended performance requirements 19
Bibliography 20

Figure 1 – Device for inserting combustion boat and test specimen 14
Figure 2 – Example of a gas washing bottle 15
Figure 3 – Test apparatus: method 1 – Use of synthetic or compressed air from a bottle 16
Figure 4 – Test apparatus: method 2 – Use of laboratory compressed air supply 17

Figure 5 – Test apparatus: method 3 – Use of ambient air sucked by means of a suction pump 18

INTRODUCTION

IEC 60754 consists of the following parts, under the general title *Test on gases evolved during combustion of materials from cables:*

– Part 1: *Determination of the halogen acid gas content*

– Part 2: *Determination of acidity (by pH measurement) and conductivity.*

IEC 60754-2 was originally developed due to concerns expressed by cable users over the amount of acid gas evolved when some cable insulating, sheathing and other materials are burned, as such corrosive effluent can cause extensive damage to electrical and electronic equipment not involved in the fire itself.

NOTE Guidance on the corrosivity of fire effluent is given in IEC 60695-5-1.

This standard provides a method for determining the acidity (by pH measurement) and conductivity of an aqueous solution of gases evolved during the combustion of materials so that limits can be agreed for cable specifications. As the test is not carried out on a complete cable test piece, for a hazard assessment the actual material volumes of the cable components should be taken into consideration.

The method provides an indirect assessment of corrosivity. However, the recommended limits of pH and conductivity can only be regarded as an indication, as the relationship between corrosion and these two parameters does not necessarily embrace all materials.

This part of IEC 60754 is linked with IEC 60754-1, but the test procedure differs considerably.