

**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 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.
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**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)

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CENELEC

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

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document have to be withdrawn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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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	-

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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.