



**SLOVENSKI STANDARD**  
**SIST EN 60068-2-74:2001/A1:2018**  
**01-september-2018**

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**Okoljsko preskušanje - 2. del: Preskusi - Preskus Xc: onesnaženje fluidov - Dopolnilo A1 (IEC 60068-2-74:1999/A1:2018)**

Environmental testing - Part 2: Tests - Test Xc: Fluid contamination (IEC 60068-2-74:1999/A1:2018)

Umweltprüfungen - Teil 2: Prüfverfahren - Prüfung Xc: Verunreinigung durch Flüssigkeiten (IEC 60068-2-74:1999/A1:2018)

Essais d'environnement - Partie 2: Essais - Essai Xc: Contamination par des fluides (IEC 60068-2-74:1999/A1:2018)

**PREVIEW**  
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**Ta slovenski standard je istoveten z: EN 60068-2-74:1999/A1:2018**

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**ICS:**

19.040      Preskušanje v zvezi z      Environmental testing  
                 okoljem

**SIST EN 60068-2-74:2001/A1:2018      en**

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EUROPEAN STANDARD

EN 60068-2-74:1999/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2018

ICS 19.040

English Version

## Environmental testing - Part 2-74: Tests - Test Xc: Fluid contamination (IEC 60068-2-74:1999/A1:2018)

Essais d'environnement - Partie 2-74: Essais - Essai Xc:  
Contamination par des fluides  
(IEC 60068-2-74:1999/A1:2018)

Umweltprüfungen - Teil 2-74: Prüfverfahren - Prüfung Xc:  
Verunreinigung durch Flüssigkeiten  
(IEC 60068-2-74:1999/A1:2018)

This amendment A1 modifies the European Standard EN 60068-2-74:1999; it was approved by CENELEC on 2018-05-30. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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.

<https://standards.cenelec.eu/>

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

**EN 60068-2-74:1999/A1:2018 (E)****European foreword**

The text of document 104/739/CDV, future edition 1 of IEC 60068-2-74:1999/A1, prepared by IEC/TC 104 "Environmental conditions, classification and methods of test" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60068-2-74:1999/A1:2018.

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) 2019-02-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2021-05-30

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

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**Endorsement notice**

SIST EN 60068-2-74:2001/A1:2018

The text of the International Standard IEC 60068-2-74:1999/A1:2018 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 60068-2-52:2017      NOTE      Harmonized as EN IEC 60068-2-52:2018 (not modified).

Replace Annex ZA of EN 60068-2-74:1999 by the following one:

**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 1817	2015	Rubber, vulcanized or thermoplastic Determination of the effect of liquids	--	-

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IEC 60068-2-74

Edition 1.0 2018-04

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

BASIC SAFETY PUBLICATION

PUBLICATION FONDAMENTALE DE SÉCURITÉ

AMENDMENT 1

AMENDEMENT 1

**iTeh STANDARD PREVIEW****(standards.iteh.ai)****Environmental testing –****Part 2-74: Tests – Test Xc: Fluid contamination**

SIST EN 60068-2-74:2001/A1:2018  
<https://standards.iteh.ai/catalog/standards/sist/71075935-8354-45dc-8693-cb6cfaf2323a/sist-en-60068-2-74-2001-a1-2018>

**Essais d'environnement –****Partie 2-74: Essais – Essai Xc: Contamination par des fluides**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

COMMISSION  
ELECTROTECHNIQUE  
INTERNATIONALE

ICS 19.040

ISBN 978-2-8322-5628-2

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## FOREWORD

This amendment has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test.

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

CDV	Report on voting
104/739/CDV	104/791/RVC

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

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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[SIST EN 60068-2-74:2001/A1:2018](https://standards.iteh.ai/catalog/standards/sist/7f075935-8354-45dc-8693-cb6cfaf2323a/sist-en-60068-2-74-2001-a1-2018)

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## 2 Normative references

*Replace the reference to ISO 1817:1985 with the following new reference:*

ISO 1817:2015, *Rubber, vulcanized or thermoplastic – Determination of the effect of liquids*

### 3.1 Specification of test fluid

*Replace the existing text with the following new text:*

The relevant specification (see Clause 12) shall specify the required test fluids which shall wherever possible be selected from the list given in Table 1. Each fluid has been specified as being representative of a group of fluids. (See Clause A.2.) The actual composition of some of the fluids specified in Table 1 are provided for information in Table 2 and Table 3.

The relevant specification shall also specify any additional fluids not listed in Table 1 for which a test is required.



**3.2 Precaution****Table 1 – Major contaminant fluid groups and test fluids**

Replace Table 1 with the following new Table 1:

**Table 1 – Major contaminant fluid groups and test fluids**

Contaminant fluid group (See Annex A for description of contamination fluids including environmental and toxicological aspects.)		Test fluid reference	Test fluid <sup>d e</sup>	Test temperature ( $\pm 2$ °C) <sup>c</sup>
Fuels	Kerosene (turbine) fuel	(a)	ISO 1817:2015, Test liquid F (see Table 2)	70 <sup>a</sup>
	Diesel fuel			
	Gasoline (piston engine) fuel	(b)	ISO 1817:2015, Test liquid B (see Table 2)	40 <sup>a</sup>
Hydraulic fluids	Mineral oil based	(c)	NATO H-520 (ON-18) (or as an alternative NATO H-515)	70
	Phosphate ester based (synthetic)	(d)	ISO 1817:2015, Test liquid 103 (see Table 3)	70
	Silicone based	(e)	Dimethyl silicone fluid grade 10 (10 mm <sup>2</sup> /s (cSt) at 25 °C) NATO S-1714 (Joint Service designation ZX-42)	70
Lubricating oils	Mineral based	(f)	SAE 10W/30 NATO O-1176 (Joint Service designation OMD 90)	70
	Ester based (synthetic)	(g)	ISO 1817:2015, Test liquid 101- (see Table 3)	150
Solvents and cleaning fluids		(h)	Propan-2-ol (isopropyl alcohol); CAS No 67-63-0, (BS 1595-1, ASTM D770 and DIN 53245)	50 <sup>a</sup>
		(i)	Denatured alcohol (methylated spirits)	23
		(j)	Detergent	23
De-icing and antifreeze fluids		(k)	Inhibited ethanediol (ethylene glycol) CAS No 107-21-1 with a volume fraction of 80 % in water	23
		(l)	Inhibited ethanediol (ethylene glycol) CAS No 107-21-1 with a volume fraction of 50 % in water	23
Runway de-icers		(m)	Ethylene glycol CAS No 107-21-1 (25 % urea / 25 % ethylene glycol in water)	23
		(n)	Potassium acetate CAS No 127-822-2 50 % inhibited potassium acetate in water	23
Insecticides		(o)	Dichlorvos (DDVP) pyrethrum based, CAS No 62-73-7 (2 % solution in kerosene CAS No 8008- 20-6)	23
		(p)	D – phenothrin CAS No 26002-80-2 2 % solution in kerosene CAS No 8008- 20-6	23
Coolant dielectric fluids		(q)	Silicate ester dielectric heat transfer fluid (commercial product "Coolanol 25R <sup>TM</sup> " <sup>b</sup> )	70