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FINAL VERSION

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Environmental testing –
Part 2-74: Tests – Test Xc: Fluid contamination

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

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CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ENVIRONMENTAL TESTING –

Part 2: Tests –
Test Xc: Fluid contamination

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This Consolidated version of IEC 60068-2-74 bears the edition number 1.1. It consists of the first edition (1999-06) [documents 104/124/FDIS and 104/129/RVD] and its amendment 1 (2018-04) [documents 104/739/CDV and 104/791/RVC]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

International Standard IEC 60068-2-74 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test*.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 3.

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

Annex A is for information only.

The committee has decided that the contents of the base publication and its amendment 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- withdrawn,
- replaced by a revised edition, or
- amended.

* IEC technical committee 50: Environmental testing, has been transformed into IEC technical committee 104.

ENVIRONMENTAL TESTING –

Part 2: Tests –
Test Xc: Fluid contamination

1 Scope

This part of IEC 60068 gives a method of test which provides a standard procedure to determine the ability of components, equipments or their constituent materials, hereinafter referred to as specimen, to withstand accidental contact with fluids, without being unacceptably affected.

The fluids listed in this part of IEC 60068 are representative of those commonly encountered in operational applications. It is not intended that a specimen should be exposed to all, or even any of them. Nor is the list intended to be complete; fluids not listed and for which a test is appropriate should be included in the relevant specification. Guidance is given in annex A on the choice of test fluids, specimens and severities.

These tests are not intended to demonstrate the suitability of components or equipments to perform in continuous contact with a fluid, e.g. an immersed motor pump. Nor are they a test to demonstrate immunity from electrolytic corrosion.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60068. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60068 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

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

3 Test fluid

3.1 Specification of test fluid

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

Since many fluids may have flash points within the test temperature range, care should be taken to ensure that adequate safety measures are taken to limit the possibility of fire or explosion.