SLOVENSKI STANDARD
SIST EN 61099:2011

01-januar-2011

Nadomešča:
SIST EN 61099:1997

Izolacijske tekočine - Specifikacije za neuporabljene sintetične organske estre za elektrotehniko (IEC 61099:2010)

Insulating liquids - Specifications for unused synthetic organic esters for electrical purposes (IEC 61099:2010)

Isolierflüssigkeiten - Anforderungen an neue synthetische organische Ester für elektrotechnische Zwecke (IEC 61099:2010)

Liquides isolants - Spécifications relatives aux esters organiques de synthèse neufs destinés aux matériels électriques (CEI 61099:2010)

Ta slovenski standard je istoveten z: **EN 61099:2010**

ICS:

29.040.01 Izolacijski fluidi na splošno Insulating fluids in general

SIST EN 61099:2011 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61099

November 2010

ICS 29.040

Supersedes EN 61099:1992

English version

Insulating liquids - Specifications for unused synthetic organic esters for electrical purposes (IEC 61099:2010)

Liquides isolants - Spécifications relatives aux esters organiques de synthèse neufs destinés aux matériels électriques (CEI 61099:2010)

Isolierflüssigkeiten - Anforderungen an neue synthetische organische Ester für elektrotechnische Zwecke (IEC 61099:2010)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 61099:2010 E

Foreword

The text of document 10/813/FDIS, future edition 2 of IEC 61099, prepared by IEC TC 10, Fluids for electrotechnical applications, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61099 on 2010-11-01.

This European Standard supersedes EN 61099:1992.

The main changes with respect to EN 61099:1992 relate to the aim of giving a more updated specification of synthetic organic esters when used as insulating liquids.

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

The following dates were fixed:

– latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2011-08-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2013-11-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61099:2010 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 61203 NOTE Harmonized as EN 61203.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60156	-	Insulating liquids - Determination of the breakdown voltage at power frequency - Test method	EN 60156	-
IEC 60247	-	Insulating liquids - Measurement of relative permittivity, dielectric dissipation factor (tan d) and d.c. resistivity	EN 60247	-
IEC 60475	-	Method of sampling liquid dielectrics	-	-
IEC 60628	1985	Gassing of insulating liquids under electrical stress and ionization	HD 488 S1	1987
IEC 60814	-	Insulating liquids - Oil-impregnated paper and pressboard - Determination of water by automatic coulometric Karl Fischer titration	EN 60814	-
IEC 61039	-	Classification of insulating liquids	EN 61039	-
IEC 61125	1992	Unused hydrocarbon-based insulating liquids - Test methods for evaluating the oxidation stability	EN 61125	1993
IEC 61620	-	Insulating liquids - Determination of the dielectric dissipation factor by measurement of the conductance and capacitance - Test method	EN 61620	-
IEC 62021-1	-	Insulating liquids - Determination of acidity - Part 1: Automatic potentiometric titration	EN 62021-1	-
IEC 62021-2	-	Insulating liquids - Determination of acidity - Part 2: Colourimetric titration	EN 62021-2	-
ISO 2211	-	Liquid chemical products - Measurement of colour in Hazen units (platinum-cobalt scale)	-	-
ISO 2592	-	Determination of flash and fire points - Cleveland open cup method	EN ISO 2592	-
ISO 2719	-	Determination of flash point - Pensky-Martens closed cup method	EN ISO 2719	-
ISO 3016	-	Petroleum products - Determination of pour point	-	-
ISO 3104	-	Petroleum products - Transparent and opaque liquids - Determination of kinematic viscosity and calculation of dynamic viscosity	EN ISO 3104	-

Publication	Year	Title	EN/HD	Year
ISO 3675	-	Crude petroleum and liquid petroleum products - Laboratory determination of density - Hydrometermethod	EN ISO 3675	-
ISO 12185	-	Crude petrolelum and petroleum products - Determination of density - Oscillating U-tube method	EN ISO 12185	-
OECD 301	1992	OECD guidelines for the testing of chemicals - Ready Biodegradability	-	-

IEC 61099

Edition 2.0 2010-08

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Insulating liquids – Specifications for unused synthetic organic esters for electrical purposes

Liquides isolants – Spécifications relatives aux esters organiques de synthèse neufs destinés aux matériels électriques

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

INSULATING LIQUIDS – SPECIFICATIONS FOR UNUSED SYNTHETIC ORGANIC ESTERS FOR ELECTRICAL PURPOSES

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.
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International Standard IEC 61099 has been prepared IEC technical committee 10: Fluids for electrotechnical applications.

This second edition cancels and replaces the first edition published in 1992 and constitutes a technical revision.

The main changes with respect to the previous edition relate to the aim of giving a more updated specification of synthetic organic esters when used as insulating liquids.

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

FDIS	Report on voting
10/813/FDIS	10/821/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.

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

INTRODUCTION

Health and safety

This International Standard does not purport to address all the safety problems associated with its use. It is the responsibility of the user of the standard to establish appropriate health and safety practices and determine the applicability of regulatory limitations prior to use.

Unused synthetic esters which are the subject of this standard should be handled with due care with regard to personal hygiene. Direct contact with eyes may cause slight irritation. In the case of eye contact, irrigation with copious quantities of clean running water should be carried out and medical attention sought.

Some of the tests specified in this standard involve the use of processes that could lead to a hazardous situation. Attention is drawn to the relevant standard for guidance.

Environment

The disposal of synthetic esters, chemicals and sample containers mentioned in this standard should be carried out in accordance with local regulations with regard to their environmental impact. Precautions should be taken to prevent the release of synthetic esters into the environment.