



SLOVENSKI STANDARD
SIST EN 62770:2014

01-julij-2014

Tekočine za elektrotehniko - Neuporabljene naravne estrske tekočine za transformatorje in podobno električno opremo (IEC 62770:2013)

Fluids for electrotechnical applications - Unused natural esters liquids for transformers and similar electrical equipment

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Fluides pour applications électrotechniques - Esters naturels neufs pour transformateurs et matériels électriques analogues

[SIST EN 62770:2014](https://standards.iteh.ai/catalog/standards/sist/2d80ca1a-ce2b-4fd4-91e6-754d15a27e6/sist-en-62770-2014)

Ta slovenski standard je istoveten z: EN 62770:2014

ICS:

29.040.01	Izolacijski fluidi na splošno	Insulating fluids in general
29.180	Transformatorji. Dušilke	Transformers. Reactors

SIST EN 62770:2014

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62770

April 2014

ICS 29.040

English version

**Fluids for electrotechnical applications -
Unused natural esters for transformers and similar electrical equipment
(IEC 62770:2013)**

Fluides pour applications
électrotechniques -
Esters naturels neufs pour
transformateurs et matériels électriques
analogues
(CEI 62770:2013)

Flüssigkeiten für elektrotechnische
Anwendungen -
Neue natürliche Ester für Transformatoren
und ähnliche elektrische Betriebsmittel
(IEC 62770:2013)

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This European Standard was approved by CENELEC on 2013-12-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 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 CEN-CENELEC Management Centre has the same status as the official versions.

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CENELEC

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 10/909/FDIS, future edition 1 of IEC 62770, prepared by IEC TC 10 "Fluids for electrotechnical applications" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62770:2014.

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) 2014-10-18
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-12-24

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Endorsement notice

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

		https://standards.iteh.ai/catalog/standards/sist/2d80ca1a-ce2b-4fd4-91e6-75fd13a27e6/sist-en-62770-2014
IEC 60422	NOTE	Harmonised as EN 60422.
IEC 61039	NOTE	Harmonised as EN 61039.
IEC 61099	NOTE	Harmonised as EN 61099.
IEC 61868	NOTE	Harmonised as EN 61868.

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>
IEC 60076-14	-	Power transformers - Part 14: Liquid-immersed power transformers using high-temperature insulation materials	EN 60076-14	-
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 δ) and d.c. resistivity	EN 60247	-
IEC 60296	-	Fluids for electrotechnical applications - Unused mineral insulating oils for transformers and switchgear	EN 60296	-
IEC 60475	-	Method of sampling insulating liquids	EN 60475	-
IEC 60666	-	Detection and determination of specified additives in mineral insulating oils	EN 60666	-
IEC 60814	-	Insulating liquids - Oil-impregnated paper and pressboard - Determination of water by automatic coulometric Karl Fischer titration	EN 60814	-
IEC 61100 ¹⁾	-	Classification of insulating liquids according to fire point and net calorific value	EN 61100	-
IEC 61125	1992	Unused hydrocarbon based insulating liquids - Test methods for evaluating the oxidation stability	EN 61125	1993
IEC 61198	-	Mineral insulating oils - Methods for the determination of 2-furfural and related compounds	EN 61198	-
IEC 61619	-	Insulating liquids - Contamination by polychlorinated biphenyls (PCBs) - Method of determination by capillary column gas chromatography	EN 61619	-
IEC 61620	-	Insulating liquids - Determination of the dielectric dissipation factor by measurement of the conductance and capacitance - Test method	EN 61620	-

¹⁾ Withdrawn in 2009 and partially replaced by IEC 61039.

IEC 62021-3	-	Insulating liquids - Determination of acidity - Part 3: Test methods for non mineral insulating oils	EN 62021-3	-
IEC 62535	2008	Insulating liquids - Test method for detection of potentially corrosive sulphur in used and unused insulating oil	EN 62535	2009
IEC 62697-1	-	Test method for quantitative determination of corrosive sulfur compounds in unused and used insulating liquids - Part 1: Test method for quantitative determination of dibenzyldisulfide (DBDS)	EN 62697-1	-
ISO 2592	-	Determination of flash and fire points - Cleveland open cup method	-	-
ISO 2719	-	Determination of flash point - Pensky-Martens - closed cup method	-	-
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	-	-
ISO 3675	-	Crude petroleum and liquid petroleum products - Laboratory determination of density - Hydrometer method	-	-
ISO 12185	-	Crude petroleum and petroleum products - Determination of density - Oscillating U-tube method	-	-
ASTM D 1275	-	Standard Test Method for Corrosive Sulfur in Electrical Insulating Oils	-	-
OECD 201-203	-	Test Guidelines for ecotoxicity	-	-
OECD 301	-	Guideline for testing of chemicals adopted by European Council	-	-
US EPA	-	Office of Prevention, Pesticides and Toxic Substances (OPPTS)	-	-
835.311	-	Fate, Transport and Transformation Test Guidelines	-	-

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IEC 62770

Edition 1.0 2013-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fluids for electrotechnical applications – Unused natural esters for transformers and similar electrical equipment

Fluides pour applications électrotechniques – Esters naturels neufs pour transformateurs et matériels électriques analogues

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**FLUIDS FOR ELECTROTECHNICAL APPLICATIONS –
UNUSED NATURAL ESTERS FOR TRANSFORMERS
AND SIMILAR ELECTRICAL EQUIPMENT**

FOREWORD

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International Standard IEC 62770 has been prepared by IEC technical committee 10: Fluids for electrotechnical applications.

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

FDIS	Report on voting
10/909/FDIS	10/933/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.

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