



SLOVENSKI STANDARD
SIST EN 62021-2:2007

01-november-2007

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Insulating liquids - Determination of acidity -- Part 2: Colourimetric titration (IEC 62021-2:2007)

Isolierflüssigkeiten - Bestimmung des Säuregehaltes -- Teil 2: Kolorimetrische Titration (IEC 62021-2:2007)

Liquides isolants - Détermination de l'acidité -- Partie 2: Titrage colorimétrique (IEC 62021-2:2007)

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Ta slovenski standard je istoveten z: EN 62021-2:2007

ICS:

29.040.10 Izolacijska olja Insulating oils

SIST EN 62021-2:2007 en,fr,de

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EUROPEAN STANDARD

EN 62021-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2007

ICS 29.040.10

English version

**Insulating liquids -
Determination of acidity -
Part 2: Colourimetric titration
(IEC 62021-2:2007)**

Liquides isolants -
Détermination de l'acidité -
Partie 2: Titrage colorimétrique
(CEI 62021-2:2007)

Isolierflüssigkeiten -
Bestimmung des Säuregehaltes -
Teil 2: Kolorimetrische Titration
(IEC 62021-2:2007)

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This European Standard was approved by CENELEC on 2007-07-01. 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 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, 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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 10/692/FDIS, future edition 1 of IEC 62021-2, prepared by IEC TC 10, Fluids for electrotechnical applications, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62021-2 on 2007-07-01.

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) 2008-04-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2010-07-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62021-2:2007 was approved by CENELEC as a European Standard without any modification.

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60475	- ¹⁾	Method of sampling liquid dielectrics	-	-
IEC 60567	- ¹⁾	Oil-filled electrical equipment - Sampling of gases and of oil for analysis of free and dissolved gases - Guidance	EN 60567	2005 ²⁾
ISO 5725	Series	Accuracy (trueness and precision) of measurement methods and results	-	-
ISO 6619	- ¹⁾	Petroleum products and lubricants - Neutralization number - Potentiometric titration method	-	-

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¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

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INTERNATIONAL
STANDARD
NORME
INTERNATIONALE

IEC
CEI

62021-2

First edition
Première édition
2007-05

**Insulating liquids –
Determination of acidity**

**Part 2:
Colourimetric titration**

iTeh STANDARD PREVIEW

**Liquides isolants –
Détermination de l'acidité**

SIST EN 62021-2:2007

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**Partie 2:
Titrage colorimétrique**



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE
CODE PRIX

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*For price, see current catalogue
Pour prix, voir catalogue en vigueur*

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INSULATING LIQUIDS –
DETERMINATION OF ACIDITY –****Part 2: Colourimetric titration**

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 62021-2 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
10/692/FDIS	10/696/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.

A list of all parts of IEC 62021 series, under the general title *Insulating liquids – Determination of acidity* can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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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INTRODUCTION

The standardized method given in IEC 62021-1 is a method for measurement of acidity in used and unused mineral oil and is a potentiometric titration requiring special instrumentation for measurement of acidity. Historically, acidity of insulating oil was measured by colourimetric titration as described in IEC 60296, 1982 edition. With the revision of IEC 60296, the colourimetric titration was deleted as that method used high volumes of sample and solvent, generating undesirable volumes of waste.

However, there is still a market requirement for having colourimetric titration as many labs use this method.

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.

The mineral oils which are the subject of this standard should be handled with due 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 advice 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.

This standard involves mineral oils, chemicals and used sample containers. The disposal of these items should be carried out in accordance with current national legislation with regard to the impact on the environment. Every precaution should be taken to prevent the release into the environment of mineral oil.