



# SLOVENSKI STANDARD

## SIST EN IEC 61203:2025

01-september-2025

Nadomešča:  
SIST EN 61203:1997

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### Sintetični estri - Smernice za vzdrževanje in uporabo v električni opremi

Synthetic esters - Guidelines for maintenance and use in electrical equipment

Synthetische organische Ester für elektrotechnische Zwecke - Leitlinie zur Wartung von Transformator-Estern in Betriebsmitteln

Esters organiques de synth&egrave;se &agrave; usages &eacute;lectriques - Guide de maintenance des esters pour transformateurs dans les mat&eacute;riels

Ta slovenski standard je istoveten z: **EN IEC 61203:2025**

<https://standards.iteh.ai/catalog/standards/sist/177ea171-786f-4fb7-a274-97a8a1f8e85b/sist-en-iec-61203-2025>

#### **ICS:**

29.035.20	Plastični in gumeni izolacijski materiali	Plastics and rubber insulating materials
29.180	Transformatorji. Dušilke	Transformers. Reactors

**SIST EN IEC 61203:2025**

**en**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN IEC 61203**

July 2025

ICS 29.040.10; 29.180

Supersedes EN 61203:1994

English Version

**Synthetic organic esters - Guidelines for maintenance and use in  
electrical equipment  
(IEC 61203:2025)**

Esters organiques synthétiques - Lignes directrices pour la  
maintenance et l'utilisation dans les matériels électriques  
(IEC 61203:2025)

Synthetische organische Ester - Leitlinien für  
Instandhaltung und Betrieb in elektrischen Betriebsmitteln  
(IEC 61203:2025)

This European Standard was approved by CENELEC on 2025-06-25. 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.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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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 IEC 61203:2025 (E)****European foreword**

The text of document 10/1259/FDIS, future edition 2 of IEC 61203, prepared by TC 10 "Fluids for electrotechnical applications" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61203:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-07-31 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2028-07-31 document have to be withdrawn

This document supersedes EN 61203:1994 and all of its amendments and corrigenda (if any).

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.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

**Endorsement notice**

The text of the International Standard IEC 61203:2025 was approved by CENELEC as a European Standard without any modification.

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

IEC 60422 NOTE Approved as EN IEC 60422

IEC 61619 NOTE Approved as EN 61619

IEC 61039 NOTE Approved as EN IEC 61039

IEC 63177<sup>1</sup> NOTE Approved as EN IEC 63177<sup>2</sup>

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<sup>1</sup> Under preparation. Stage at the time of publication: IEC FDIS 63177:2024.

<sup>2</sup> Under preparation. Stage at the time of publication: FprEN IEC 63177:2024.

## 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 Where 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.cencenelec.eu](http://www.cencenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60156	-	Insulating liquids - Determination of the breakdown voltage at power frequency - Test method	EN IEC 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 insulating liquids	EN IEC 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 60970	-	Insulating liquids - Methods for counting and sizing particles	EN 60970	-
IEC 61099	-	Insulating liquids - Specifications for unused synthetic organic esters for electrical purposes	EN 61099	-
IEC 61125	-	Insulating liquids - Test methods for oxidation stability - Test method for evaluating the oxidation stability of insulating liquids in the delivered state	EN IEC 61125	-
IEC 62021-3	-	Insulating liquids - Determination of acidity - Part 3: Test methods for non-mineral insulating oils	EN 62021-3	-
IEC 62535	-	Insulating liquids - Test method for detection of potentially corrosive sulphur in used and unused insulating oil	EN 62535	-
IEC 62961	-	Insulating liquids - Test methods for the determination of interfacial tension of insulating liquids - Determination with the ring method	EN IEC 62961	-
ISO 2049	-	Petroleum products - Determination of colour (ASTM scale)	-	-
ISO 2211	-	Liquid chemical products - Measurement of colour in Hazen units (platinum-cobalt scale)	-	-

**EN IEC 61203:2025 (E)**

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 2592	-	Petroleum products - Determination of flash and fire points - Cleveland open cup method	-	-
ISO 3016	-	Petroleum and related products from natural or synthetic sources - Determination of pour point	EN ISO 3016	-
ISO 3104	-	Petroleum products - Transparent and opaque liquids - Determination of kinematic viscosity and calculation of dynamic viscosity	EN ISO 3104	-
ISO 3675	-	Crude petroleum and liquid petroleum products - Laboratory determination of density - Hydrometer method	EN ISO 3675	-
ISO 4406	-	Hydraulic fluid power - Fluids - Method for coding the level of contamination by solid particles	-	-
ISO 5661	-	Petroleum products - Hydrocarbon liquids - Determination of refractive index	-	-
ISO 12185	-	Crude petroleum, petroleum products and related products - Determination of density - Laboratory density meter with an oscillating U-tube sensor	EN ISO 12185	-
ASTM D 92	-	Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester	-	-
ASTM D 97	-	Standard Test Method for Pour Point of Petroleum Products	-	-
ASTM D1275	-	Standard test method for corrosive sulfur in electrical insulating liquids	-	-
ASTM D1500	-	Standard Test Method for ASTM Color of Petroleum Products (ASTM Colour Scale)	-	-
ASTM D 5950	-	Standard Test Method for Pour Point of Petroleum Products (Automatic Tilt Method)	-	-
ASTM D 6922	-	Standard Test Method for Determination of Homogeneity and Miscibility in Automotive Engine Oils	-	-
ASTM D 7042	-	Standard Test Method for Dynamic Viscosity and Density of Liquids by Stabinger Viscometer (and the Calculation of Kinematic Viscosity)	-	-
ASTM D 7155	-	Standard Practice for Evaluating Compatibility of Mixtures of Turbine Lubricating Oils	-	-
ASTM D 7752	-	Standard Practice for Evaluating Compatibility of Mixtures of Hydraulic Liquids	-	-
DIN 51353	-	Testing of insulating oils; detection of corrosive sulfur; silver strip test	-	-
DIN 51423-1	-	Testing of mineral oils - Part 1: Measurement of the relative refractive index with the precision refractometer	-	-