



# SLOVENSKI STANDARD SIST EN ISO 3104:2024

01-januar-2024

Nadomešča:  
SIST EN ISO 3104:2020

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**Naftni proizvodi - Prozorne in neprozorne tekočine - Določanje kinematične viskoznosti in izračun dinamične viskoznosti (ISO 3104:2023)**

Petroleum products - Transparent and opaque liquids - Determination of kinematic viscosity and calculation of dynamic viscosity (ISO 3104:2023)

Mineralölerzeugnisse - Durchsichtige und undurchsichtige Flüssigkeiten - Bestimmung der kinematischen Viskosität und Berechnung der dynamischen Viskosität (ISO 3104:2023)

Produits pétroliers - Liquides opaques et transparents - Détermination de la viscosité cinématique et calcul de la viscosité dynamique (ISO 3104:2023)

Ta slovenski standard je istoveten z: **EN ISO 3104:2023**

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**ICS:**

75.080      Naftni proizvodi na splošno      Petroleum products in general

**SIST EN ISO 3104:2024**

**en,fr,de**



EUROPEAN STANDARD

EN ISO 3104

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2023

ICS 75.080

Supersedes EN ISO 3104:2020

English Version

## Petroleum products - Transparent and opaque liquids - Determination of kinematic viscosity and calculation of dynamic viscosity (ISO 3104:2023)

Produits pétroliers - Liquides opaques et transparents  
- Détermination de la viscosité cinématique et calcul de  
la viscosité dynamique (ISO 3104:2023)

Mineralölerzeugnisse - Durchsichtige und  
undurchsichtige Flüssigkeiten - Bestimmung der  
kinematischen Viskosität und Berechnung der  
dynamischen Viskosität (ISO 3104:2023)

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## European foreword

This document (EN ISO 3104:2023) has been prepared by Technical Committee ISO/TC 28 "Petroleum and related products, fuels and lubricants from natural or synthetic sources" in collaboration with Technical Committee CEN/TC 19 "Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2024, and conflicting national standards shall be withdrawn at the latest by May 2024.

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# INTERNATIONAL STANDARD

# ISO 3104

Fourth edition  
2023-11

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## **Petroleum products — Transparent and opaque liquids — Determination of kinematic viscosity and calculation of dynamic viscosity**

*Produits pétroliers — Liquides opaques et transparents —  
Détermination de la viscosité cinématique et calcul de la viscosité  
dynamique*

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Reference number  
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Published in Switzerland



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## ISO 3104:2023(E)

### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 28, *Petroleum and related products, fuels and lubricants from natural or synthetic sources*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 19, *Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 3104:2020), which has been technically revised.

The main changes are as follows:

- manual Procedure A has been designated as the referee test method in case of dispute;
- the DCT requirements have been updated in [Table 1](#);
- allowable DCT drift in [7.3](#) has been aligned with [Table 1](#);
- extra instructions for quality control have been added referring to ISO 4259-4;
- complying thermometers have been updated in [Table B2](#);
- the calculation has been corrected in [Annex D](#).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

Many petroleum products and some non-petroleum materials are used as lubricants. The correct operation of equipment depends upon the appropriate viscosity of the liquid being used. In addition, the viscosity of many petroleum fuels is important for the estimation of optimum storage, handling and operational conditions. Thus, the accurate measurement of viscosity is essential to many product specifications.

This document describes two test methods: Procedure A (manual) and Procedure B (automated). Procedure A is the referee test method (or reference test method) to resolve doubts or dispute.

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