



SLOVENSKI STANDARD
SIST EN ISO 4264:1998
01-maj-1998

BUZb]dfc]nj cX]!'nfU i b'WfUbg_Y[U]bXY_gUgfYXb\ 'XYgh]Urcj `dc`YbU V]g
ýhf]a]gdfYa Yb`]j _Ua]fGC` (&* (.%-) Ł

Petroleum products - Calculation of cetane index of middle-distillate fuels by four-variable equation (ISO 4264:1995)

Produits pétroliers - Calcul de l'indice de cétane des distillats moyens par équation a quatre variables (ISO 4264:1995)

Ta slovenski standard je istoveten z: EN ISO 4264:1996
SIST EN ISO 4264:1998
<https://standards.iteh.ai/catalog/standards/sist/a7b7a462-5215-463c-991c-b5fdada1bdb6/sist-en-iso-4264-1998>

ICS:

75.160.20 V^\[æ\ [ãæ Liquid fuels

SIST EN ISO 4264:1998 **en**

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EUROPEAN STANDARD

EN ISO 4264

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 1996

ICS 75.200

Descriptors: See ISO document

English version

**Petroleum products - Calculation of cetane index
of middle-distillate fuels by the four-variable
equation (ISO 4264:1995)**

Produits pétroliers - Calcul de l'indice de
cétane des distillats moyens par équation à
quatre variables (ISO 4264:1995)

This European Standard was approved by CEN on 1996-09-30. CEN 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 CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Foreword

The text of the International Standard from Technical Committee ISO/TC 28 "Petroleum products and lubricants" of the International Organization for Standardization (ISO) has been taken over as an European Standard by Technical Committee CEN/TC 19 "Petroleum products, lubricants and related products", the secretariat of which is held by NNI.

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 August 1996, and conflicting national standards shall be withdrawn at the latest by August 1996.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 4264:1995 has been approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

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Annex ZA (normative)
Normative references to international publications
with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 3675	1993	Crude petroleum and liquid petroleum products - Laboratory determination of density of relative density - Hydrometer method	EN ISO 3675	1993
ISO 12185	1996	Crude petroleum and petroleum products - Determination of density - Oscillating U-tube method	EN ISO 12185	1996

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INTERNATIONAL STANDARD

ISO
4264

First edition
1995-10-01

Petroleum products — Calculation of cetane index of middle-distillate fuels by the four-variable equation

iTeh STANDARD PREVIEW

*Produits pétroliers — Calcul de l'indice de cétane des distillats moyens
par équation à quatre variables*

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Reference number
ISO 4264:1995(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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 4264 was prepared by Technical Committee ISO/TC 28, *Petroleum products and lubricants*.

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Petroleum products — Calculation of cetane index of middle-distillate fuels by the four-variable equation

WARNING — The use of this International Standard may involve hazardous materials, operations and equipment. This International Standard does not purport to address all the safety problems associated with its use. It is the responsibility of the user of this International Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This International Standard describes a procedure for the calculation of the cetane index of middle-distillate fuels from petroleum-derived sources. The calculated value is termed the "cetane index by four-variable equation". Throughout the remaining text of this International Standard, the term "cetane index" will imply cetane index by four-variable equation.

This International Standard is not applicable to fuels containing additives for raising the cetane number, nor to pure hydrocarbons, nor to distillate fuels derived from coal. It is applicable to fuels containing non-petroleum derivatives from tar sands and oil shale.

NOTES

1 This International Standard was originally developed using a matrix of fuels, some of which contained non-petroleum derivatives from tar sands and oil shale. Other cetane index equations have since been developed which may be more applicable to tar sands products.

2 Cetane index is not an alternative way to express cetane number; it is a supplementary tool, to be used with due regard for its limitations.

3 Cetane index is used to estimate the cetane number of diesel fuel when a test engine is not available to determine this property directly, or when insufficient sample is available for an engine rating. In cases where the cetane number of a fuel has been previously established, cetane index may

be used to verify the cetane number of subsequent samples of that fuel, provided the fuel's source and mode of manufacture remain unchanged.

The recommended range of fuel properties for application of this International Standard is as follows:

Fuel property	Recommended range
Cetane number	32,5 - 56,5
Density at 15 °C, kg/m ³	805,0 - 895,0
10 % (V/V) distillation recovery temperature, °C	171 - 259
50 % (V/V) distillation recovery temperature, °C	212 - 308
90 % (V/V) distillation recovery temperature, °C	251 - 363

Within the recommended range of cetane number (32,5 to 56,5), the expected error of the prediction via the cetane index equation will be less than ± 2 cetane numbers for 65 % of the distillate fuels examined. Errors may be greater for fuels whose properties fall outside the recommended range of application.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publi-