

### SLOVENSKI STANDARD SIST EN ISO 6974-3:2019

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Nadomešča:

SIST EN ISO 6974-3:2001

Zemeljski plin - Določevanje sestave s plinsko kromatografijo in s tem povezana negotovost - 3. del: Natančnost in odstopanje (ISO 6974-3:2018)

Natural gas - Determination of composition and associated uncertainty by gas chromatography - Part 3: Precision and bias (ISO 6974-3:2018)

Erdgas - Bestimmung der Zusammensetzung und der zugehörigen Unsicherheit durch Gaschromatographie - Teil 3: Präzision und Bias (ISO 6974-3:2018)

Gaz naturel - Détermination de la composition et de l'incertitude associée par chromatographie en phase gazeuse «Partie 3:dFidélité et biais (ISO 6974-3:2018) 1641168d059/sist-en-iso-6974-3-2019

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metode analysis

75.060 Zemeljski plin Natural gas

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**SIST EN ISO 6974-3:2019** 

## iTeh STANDARD PREVIEW (standards.iteh.ai)

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 6974-3

November 2018

ICS 75.060

Supersedes EN ISO 6974-3:2001

#### **English Version**

# Natural gas - Determination of composition and associated uncertainty by gas chromatography - Part 3: Precision and bias (ISO 6974-3:2018)

Gaz naturel - Détermination de la composition et de l'incertitude associée par chromatographie en phase gazeuse - Partie 3: Fidélité et biais (ISO 6974-3:2018)

Erdgas - Bestimmung der Zusammensetzung und der zugehörigen Unsicherheit durch Gaschromatographie - Teil 3: Präzision und Bias (ISO 6974-3:2018)

This European Standard was approved by CEN on 14 November 2018.

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## iTeh STANDARD PREVIEW (standards.iteh.ai)

EN ISO 6974-3:2018 (E)

#### **European foreword**

This document (EN ISO 6974-3:2018) has been prepared by Technical Committee ISO/TC 193 "Natural gas" in collaboration with Technical Committee CEN/TC 238 "Test gases, test pressures, appliance categories and gas appliance types" the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### iTeh STANDARD PREVIEW Endorsement notice (standards.iteh.ai)

The text of ISO 6974-3:2018 has been approved by CEN as EN ISO 6974-3:2018 without any modification.

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**SIST EN ISO 6974-3:2019** 

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 6974-3:2019

## INTERNATIONAL STANDARD

ISO 6974-3

Second edition 2018-10

# Natural gas — Determination of composition and associated uncertainty by gas chromatography —

Part 3: **Precision and bias** 

iTeh STGaz naturel R Détermination de la composition et de l'incertitude associée par chromatographie en phase gazeuse —

(Standards et biais al)



ISO 6974-3:2018(E)

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#### ISO 6974-3:2018(E)

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ISO 6974-3:2018(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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>. (standards.iteh.ai)

This document was prepared by Technical Committee ISO/TC 193, *Natural gas*, Subcommittee SC 1, *Analysis of natural gas*.

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https://standards.iteh.ai/catalog/standards/sist/a26f3f5b-c743-4943-9d37-

This second edition cancels and replaces the first edition (ISO 697423:2000), which has been technically revised.

A list of all parts in the ISO 6974 series can be found on the ISO website.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

### Natural gas — Determination of composition and associated uncertainty by gas chromatography —

#### Part 3:

#### Precision and bias

#### 1 Scope

This document describes the precision that can be expected from the gas chromatographic method that is set up in accordance with ISO 6974-1. The stated precision provides values for the magnitude of variability that can be expected between test results when the method described in ISO 6974-1 is applied in one or more competent laboratories. This document also gives guidance on the assessment of bias.

#### 2 Normative references

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.

ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories

#### SIST EN ISO 6974-3:2019

Terms and definitions.iteh.ai/catalog/standards/sist/a26f3f5b-c743-4943-9d37-

16411f38d059/sist-en-iso-6974-3-2019

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at: <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 3.1

#### measurement precision

closeness of agreement between indications or measured quantity values obtained by replicate measurements on the same or similar objects under specified conditions

Note 1 to entry: Measurement precision is usually expressed numerically by measures of imprecision, such as standard deviation, variance, or coefficient of variation under the specified conditions of measurement.

Note 2 to entry: The 'specified conditions' can be, for example, repeatability conditions of measurement, intermediate precision conditions of measurement, or reproducibility conditions of measurement (see ISO 5725-1).

Note 3 to entry: Measurement precision is used to define measurement repeatability, intermediate measurement precision, and measurement reproducibility.

Note 4 to entry: Sometimes "measurement precision" is erroneously used to mean measurement accuracy.

[SOURCE: JCGM 200:2012, 2.15]