

<b>STN</b>	<b>Analýza zemného plynu Biometán Stanovenie VOC tepelnou desorpčnou plynovou chromatografiou s plameňovoionizačným detektorom a/alebo s detektorom hmotnostnej spektrometrie (ISO 2620: 2024)</b>	<b>STN EN ISO 2620</b>  38 6134
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Analysis of natural gas - Biomethane - Determination of VOCs by thermal desorption gas chromatography with flame ionization and/or mass spectrometry detectors (ISO 2620:2024)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/24

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EUROPEAN STANDARD

EN ISO 2620

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2024

ICS 75.060

English Version

Analysis of natural gas - Biomethane - Determination of  
VOCs by thermal desorption gas chromatography with  
flame ionization and/or mass spectrometry detectors (ISO  
2620:2024)

Analyse du gaz naturel - Biométhane - Détermination  
des COV par chromatographie en phase gazeuse à  
désorption thermique avec détecteurs à ionisation de  
flamme et/ou spectrométrie de masse (ISO 2620:2024)

Analyse von Erdgas - Biomethan - Bestimmung von  
flüchtigen organischen Verbindungen durch  
thermische Desorptionsgaschromatographie mit  
Flammenionisations- und/oder  
Massenspektrometriedektoren (TD GC FID/MS) (ISO  
2620:2024)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

**EN ISO 2620:2024 (E)**

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## **European foreword**

This document (EN ISO 2620:2024) has been prepared by Technical Committee ISO/TC 193 "Natural gas" in collaboration with Technical Committee CEN/TC 408 "Natural gas and biomethane for use in transport and biomethane for injection in the natural gas grid" 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of an identical text or by endorsement, at the latest by October 2024, and conflicting national standards shall be withdrawn at the latest by October 2024.

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## **Endorsement notice**

The text of ISO 2620:2024 has been approved by CEN as EN ISO 2620:2024 without any modification.



# International Standard

**ISO 2620**

## **Analysis of natural gas — Biomethane — Determination of VOCs by thermal desorption gas chromatography with flame ionization and/or mass spectrometry detectors**

*Analyse du gaz naturel — Biométhane — Détermination des  
COV par chromatographie en phase gazeuse à désorption  
thermique avec détecteurs à ionisation de flamme et/ou  
spectrométrie de masse*

**First edition  
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CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

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## ISO 2620:2024(en)

### 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 193, *Natural gas*, Subcommittee SC 1, *Analysis of natural gas*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 408, *Natural gas and biomethane for use in transport and biomethane for injection in the natural gas grid*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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).



**ISO 2620:2024(en)****Introduction**

This document supports the implementation of specifications for biomethane and biogas when used in the natural gas grids and when used as a transport fuel. Implementation of these specifications require fit-for-purpose test methods with known performance and acceptable metrological traceability to support the trade in renewable gases and conformity assessment.

Depending on the production method, biogas usually contains volatile organic compounds (VOCs) such as terpenes, siloxanes, hydrocarbons, sulfur containing compounds, oxygenated hydrocarbons, halogenated hydrocarbons, ketones, alcohols, and esters. VOCs can also be found in the biomethane even after upgrading.

# Analysis of natural gas — Biomethane — Determination of VOCs by thermal desorption gas chromatography with flame ionization and/or mass spectrometry detectors

## 1 Scope

This document describes a method for sampling and analysis of volatile organic compounds (VOCs), including siloxanes, terpenes, organic sulfur compounds, in natural gas and biomethane matrices, using thermal desorption gas chromatography with flame ionization and/or mass spectrometry detectors (TD-GC-FID/MS).

## 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 14532, *Natural gas — Vocabulary*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**