
**Biometan ter drugi obnovljivi in nizkoogljični plini, bogati z metanom -
Specifikacije za dodajanje v omrežje zemeljskega plina in za zmesi z zemeljskim
plinom kot gorivom za vozila**

Biomethane and other renewable and low-carbon methane rich gases - Specifications for injection in the natural gas network and for mixtures with natural gas as automotive fuel

Biomethan und andere erneuerbare und kohlenstoffarme methanreiche Gase - Spezifikationen für die Einspeisung in das Erdgasnetz und für Gemische mit Erdgas als Kraftstoff für Kraftfahrzeuge

Biométhane et autres gaz renouvelables et à faible teneur en carbone riches en méthane - Spécifications pour l'injection dans le réseau de gaz naturel et pour les mélanges avec le gaz naturel comme carburant automobile

Ta slovenski standard je istoveten z: prEN 16723

ICS:

27.190	Biološki viri in drugi alternativni viri energije	Biological sources and alternative sources of energy
75.060	Zemeljski plin	Natural gas
75.160.30	Plinska goriva	Gaseous fuels

oSIST prEN 16723:2026

en,fr,de

Sample Document

get full document from standards.iteh.ai

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 16723

July 2026

ICS

Will supersede EN 16723-1:2016, EN 16723-2:2017

English Version

Biomethane and other renewable and low-carbon methane rich gases - Specifications for injection in the natural gas network and for mixtures with natural gas as automotive fuel

Biométhane et autres gaz renouvelables et à faible teneur en carbone riches en méthane - Spécifications pour l'injection dans le réseau de gaz naturel et pour les mélanges avec le gaz naturel comme carburant automobile

Biomethan und andere erneuerbare und kohlenstoffarme methanreiche Gase - Spezifikationen für die Einspeisung in das Erdgasnetz und für Gemische mit Erdgas als Kraftstoff für Kraftfahrzeuge

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 408.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

© 2026 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. prEN 16723:2026 E

Contents	Page
European foreword	3
Introduction	4
1 Scope	7
2 Normative references	7
3 Terms and definitions	8
4 Parameters and test methods	11
4.1 General	11
4.2 Standard reference conditions	12
4.3 Applicable requirements and test methods for renewable and low-carbon methane rich gases for injection in the natural gas network	12
4.4 Requirement on climate-dependant characteristic and test methods for natural gas and renewable and low-carbon methane rich gases as automotive fuels	15
5 Sampling	15
6 Marking, labelling and packaging	16
Annex A (informative) Parameters	17
A.1 Total silicon	17
A.2 Chlorinated and fluorinated compounds	17
A.3 Carbon monoxide (CO)	18
A.4 Amines	18
A.5 Terpenes	18
A.6 Heavy hydrocarbons and polycyclic aromatic hydrocarbons (PAHs)	18
A.7 Hydrogen	18
A.8 Compressor oil, dust impurities and biogenic materials	19
A.9 Heavy metal	19
A.10 Water and hydrocarbon dew point temperature	20
Annex B (informative) Odorization and sulfur	21
B.1 CEN/TC 408 approach	21
B.2 General	21
B.3 Total sulfur from Odorants	21
Annex C (informative) Examples of different compliance schemes	22
C.1 General	22
C.2 General prescriptions	22
C.2.1 Agreement conditions	22
C.2.2 Upgrading plants	22
C.2.3 Control and monitoring	22
C.2.4 Measurement	23
C.2.5 Risk assessment	23
C.3 Common practices	23
Annex D (informative) A-deviations	26
Bibliography	27

European foreword

This document (prEN 16723:2026) has been prepared by Technical Committee CEN/TC 408, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 16723-1:2016 and EN 16723-2:2017.

In comparison with the previous edition, the following technical modifications have been made:

- EN 16723-1 and EN 16723-2 have been merged.
- Extension to pyrogasification, hydrothermal gasification, power to methane.
- Addition of analysis methods from ISO/TC 193/SC1.
- Addition of calculation methods for methane number from ISO/TC 193.

Sample Document

get full document from standards.iteh.ai

prEN 16723 (E)

Introduction

To support the implementation of Directive 2009/28/EC on the promotion of the use of energy from renewable sources, the European Commission launched in 2010 a standardization mandate M/475 [1]. This mandate was asking for the development of a set of quality specifications for biomethane to be used as a fuel for vehicle engines and to be injected in natural gas pipelines (network). Biomethane in this context can be produced from biological (fermentation, digestion, etc.) and thermochemical processing of biomass and is appropriate to be used as a blending component to natural gas.

CEN/TC 408 was created to answer this mandate and developed:

- EN 16723-1:2016, *Natural gas and biomethane for use in transport and biomethane for injection in the natural gas network - Part 1: Specifications for biomethane for injection in the natural gas network*
- EN 16723-2:2017, *Natural gas and biomethane for use in transport and biomethane for injection in the natural gas network - Part 2: Automotive fuels specification*

Some technical aspects were still discussed, and the European Commission proposed to finance pre-normative research to remove technical barriers to the development of biomethane. This research was conducted in 3 phases by GERG, the Gas Research European Group, under the supervision of CEN/TC 408:

- SA/CEN/RESEARCH/475/2017-07 (2018-2019, Phase 2a) - experimental work on siloxanes on passenger cars and gas fired home appliances, and a literature study on impacts of sulphur, impacts of oxygen, particularly related to underground storage and corrosion, and health impacts.
- SA/CEN/RESEARCH/475/2019-09 (2020-2022, Phase 2b) - continued experimental work on siloxanes for heavy duty engines and industrial boilers, commencement of experimental campaign on sulphur, and on oxygen impacts. Improving specific knowledge on biomethane at the European level, particularly in relation to impact of feedstocks,
- BioStar2C (2022-2024, Phase 2c) - Completion of the experimental and literature campaigns begun in Phase 2b to support the delivery by CEN TC 408 and update of the standards.

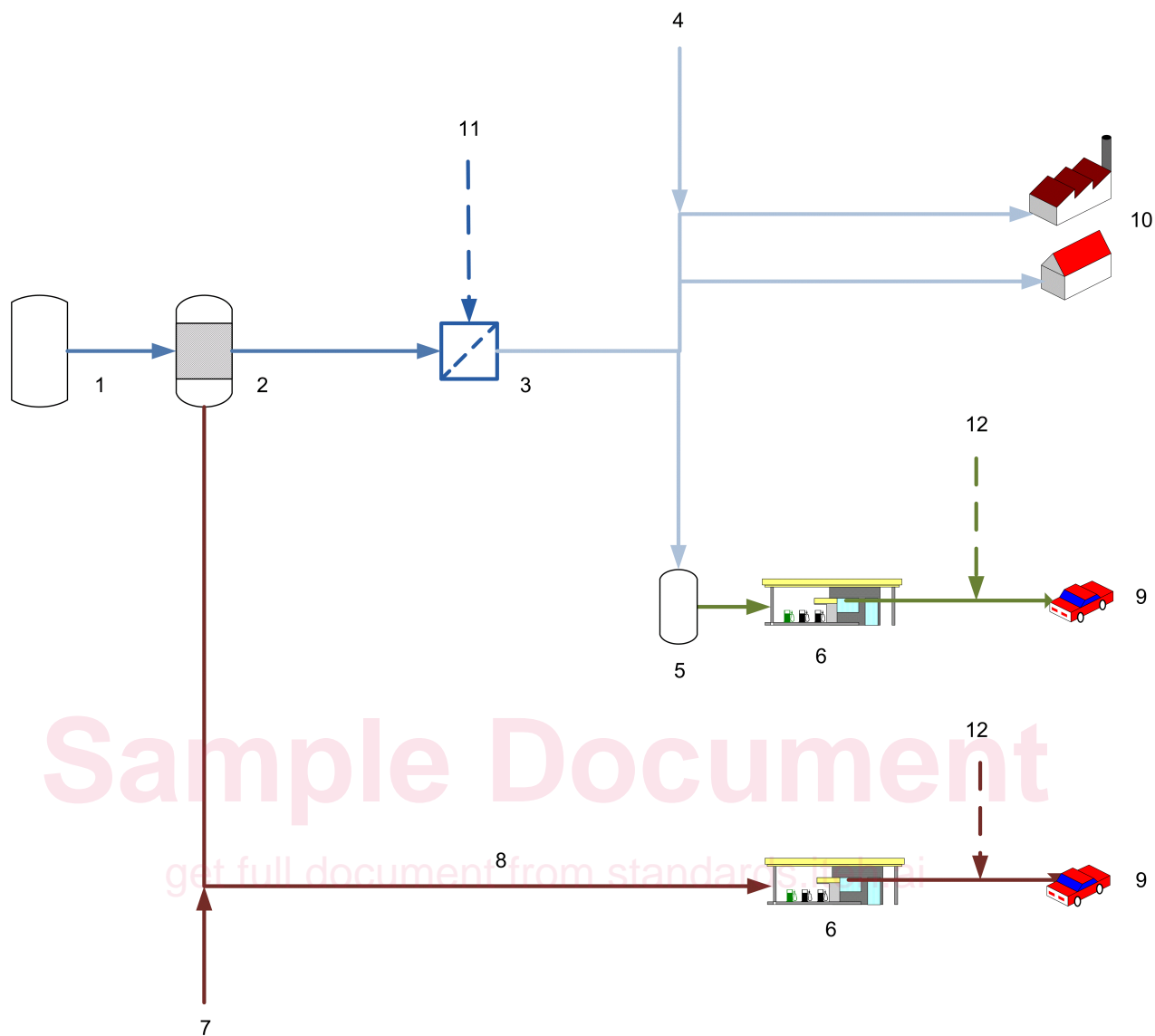
Standardized analysis methods specific for biomethane were also missing such as amine, halogen, siloxane, compressor oil... ISO/TC 193/SC1, *Analysis of natural gas*, launched a dedicated WG25, *Biomethane*, to develop these methods. They were developed under the Vienna Agreement with CEN/TC 408.

Since the publication of the standards, the production of biomethane has progressed in Europe. New ways of producing other renewable and low-carbon gases also started: pyro-gasification, hydrothermal gasification, methanation, power-to-gas, etc. The title and scope of CEN/TC 408 were extended to these new production processes and intrants besides biomass: "Biomethane and other renewable and low-carbon methane rich gases". There has also been a wider introduction of heavy-duty vehicles using natural gas and biomethane. Several different engine technologies are used on the market, including spark ignited engines and engines with diesel-like combustion (High Pressure Direct Injection).

To take into account the experience gained since the publication of EN 16723-1 and EN 16723-2, the results of the pre-normative research conducted by GERG and the publication of analysis methods by ISO/TC 193/SC1, CEN/TC 408 decided to revise the standards and merge the two parts into one.

The intention is also to consider the different production processes and sources of the renewable and low-carbon methane rich gases production to indicate what component should be measured or not.

In the automotive sector, the use of natural gas requires additional quality definitions to maintain full engine durability and performance over lifetime. Considering the technological possibilities of the grid, the standard natural gas grade meets the requirements of most conventional engines. As some EU member countries have tighter legal requirements on emission relevant fuel parameters such as sulfur, a second dedicated grade is defined.



Key

- 1 biogas from digestion or thermo- chemical process
- 2 upgrading
- 3 injection into the gas grid
- 4 natural gas grid
- 5 conditioning
- 6 refuelling station
- 7 non-grid sourced natural gas
- 8 local dedicated infrastructure
- 9 automotive use
- 10 domestic and industrial use
- 11 grid specification