Natural gas - Quality designation

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EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 13686:2005 sisaldab Euroopa standardi EN ISO 13686:2005 ingliskeelset teksti. Käesolev dokument on jõustatud 22.06.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN ISO 13686:2005 consists of the English text of the European standard EN ISO 13686:2005. This document is endorsed on 22.06.2005 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This International Standard specifies the parameters required to describe finally processed and, where required, blended natural gas. Such gas is referred to subsequently in this text simply as “natural gas”.	**Scope:** This International Standard specifies the parameters required to describe finally processed and, where required, blended natural gas. Such gas is referred to subsequently in this text simply as “natural gas”.

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English version

Natural gas - Quality designation (ISO 13686:1998)

Gaz naturel - Désignation de la qualité (ISO 13686:1998)

This European Standard was approved by CEN on 17 April 2005.

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.

This European Standard exists 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

The text of ISO 13686:1998 has been prepared by Technical Committee ISO/TC 193 "Natural gas" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 13686:2005 by CMC.

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 November 2005, and conflicting national standards shall be withdrawn at the latest by November 2005.

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

Endorsement notice

The text of ISO 13686:1998 has been approved by CEN as EN ISO 13686:2005 without any modifications.

INTERNATIONAL STANDARD

ISO 13686

First edition
1998-05-01

Natural gas — Quality designation

Gaz naturel — Désignation de la qualité

Reference number
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Contents

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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 13686 was prepared by Technical Committee ISO/TC 193, *Natural gas*.

Annexes A to H of this International Standard are for information only.

Introduction

The need for an International Standard concerning the designation of natural gas quality was a basic reason for the establishment of ISO/TC 193 in 1989. Standardisation of the designation of quality is specifically stated in the scope of the TC. Natural gas, supplying 20 % of the world's primary energy, is likely to increase its market share greatly. Yet there is currently no generally accepted definition of natural gas quality.

To meet this need, it was decided that a general statement of the parameters (i.e. components and properties) required should be established and that the resulting International Standard would not specify values of, or limits for, these parameters.

Furthermore, it was decided that general-purpose natural gas transmitted to local distribution systems (LDS), referred to as "natural gas", should be the first consideration. Thus, this International Standard was developed. Informative annexes are attached as examples of actual natural gas quality specifications that already exist.

This International Standard does not impose any quality restrictions on raw gas transported via pipelines or gathering systems to processing or treating facilities.

It should be understood that this International Standard covers natural gas at the pipeline level prior to any treatment by LDS for peakshaving purposes. This covers the vast percentage of the natural gas that is sold in international trade and transmitted for custody transfer to local distribution systems.

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Natural gas — Quality designation

1 Scope

This International Standard specifies the parameters required to describe finally processed and, where required, blended natural gas. Such gas is referred to subsequently in this text simply as "natural gas".

The main text of this standard contains a list of these parameters, their units and references to measurement standards. Informative annexes give examples of typical values for these parameters, with the main emphasis on health and safety.

In defining the parameters governing composition, physical properties and trace constituents, consideration has also been given to existing natural gases to ensure their continuing viability.

The question of interchangeability is dealt with in annex A clause A.2.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6326-1:1989,	*Natural gas - Determination of sulfur compounds - Part 1: General introduction.*
ISO 6326-2:1981,	*Gas analysis - Determination of sulphur compounds in natural gas - Part 2: Gas chromatographic method using an electrochemical detector for the determination of odoriferous sulphur compounds.*
ISO 6326-3:1989,	*Natural gas - Determination of sulfur compounds - Part 3: Determination of hydrogen sulfide, mercaptan sulfur and carbonyl sulfide sulfur by potentiometry.*
ISO 6326-4:1994,	*Natural gas - Determination of sulfur compounds - Part 4: Gas chromatographic method using a flame photometric detector for the determination of hydrogen sulfide, carbonyl sulfide and other sulfur-containing odorants.*

ISO 6326-5:1989,	*Natural gas - Determination of sulfur compounds - Part 5: Lingener combustion method.*
ISO 6327:1981,	*Gas analysis - Determination of the water dew point of natural gas - Cooled surface condensation hygrometers.*
ISO 6568:1981,	*Natural gas - Simple analysis by gas chromatography.*
ISO 6570-1:1983,	*Natural gas - Determination of potential hydrocarbon liquid content - Part 1: Principles and general requirements.*
ISO 6570-2:1984,	*Natural gas - Determination of potential hydrocarbon liquid content - Part 2: Weighing method.*
ISO 6570-3:1984,	*Natural gas - Determination of potential hydrocarbon liquid content - Part 3: Volumetric method.*
ISO 6974:1984,	*Natural gas - Determination of hydrogen, inert gases and hydrocarbons up to C_8 - Gas chromatographic method*
ISO 6975:1997,	*Natural gas - Extended analysis - Gas chromatographic method.*
ISO 6976:1995,	*Natural gas - Calculation of calorific values, density, relative density and Wobbe index from composition.*
ISO 10101-1:1993,	*Natural gas - Determination of water by the Karl Fischer method - Part 1: Introduction.*
ISO 10101-2:1993,	*Natural gas - Determination of water by the Karl Fischer method - Part 2: Titration procedure.*
ISO 10101-3:1993,	*Natural gas - Determination of water by the Karl Fischer method - Part 3: Coulometric procedure.*
ISO 10715:1997,	*Natural gas - Sampling.*
ISO 11541:1997,	*Natural gas - Determination of water content at high pressure.*
ISO 12213-1:1997,	*Natural gas - Calculation of compression factor - Part 1: Introduction and guidelines.*
ISO 13443:1996,	*Natural gas - Standard reference conditions.*