

**Natural gas - Organic components used as odorants -
Requirements and test methods (ISO 13734:2013)**

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NATIONAL FOREWORD

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ICS 75.060

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English Version

Natural gas - Organic components used as odorants - Requirements and test methods (ISO 13734:2013)

Gaz naturel - Composés organiques utilisés comme
odorisants - Exigences et méthodes d'essai (ISO
13734:2013)

Erdgas - Organische Verbindungen zur Verwendung als
Odoriermittel - Anforderungen und Prüfverfahren (ISO
13734:2013)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 13734:2013) has been prepared by Technical Committee ISO/TC 193 "Natural gas".

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of an identical text or by endorsement, at the latest by May 2014, and conflicting national standards shall be withdrawn at the latest by May 2014.

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

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Endorsement notice

The text of ISO 13734:2013 has been approved by CEN as EN ISO 13734:2013 without any modification.

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Introduction

Processed natural gas received from suppliers normally has little or no odour. For safety reasons, natural gas is therefore odorized to permit the detection by smell of the gas at very low concentrations in air.

NOTE It is a common requirement that natural gas in air be readily detectable by smell at a concentration of 20 % of the lower flammability limit (LFL). The LFL of natural gas is normally taken as the volume fraction in air of 4 % to 5 %.

Natural gas — Organic components used as odorants — Requirements and test methods

1 Scope

This International Standard specifies requirements and test methods for organic compounds suitable for odorization of natural gas and natural gas substitutes for public gas supply, hereafter referred to as odorants.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3007:2005, *Petroleum products and crude petroleum — Determination of vapour pressure — Reid method*

ISO 3015:1992, *Petroleum products — Determination of cloud point*

ISO 4256:1996, *Liquefied petroleum gases — Determination of gauge vapour pressure — LPG method*

ISO 4626:1980, *Volatile organic liquids — Determination of boiling range of organic solvents used as raw materials*

ISO 14532, *Natural gas — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14532 (in particular [3.1](#) to [3.4](#)) and the following apply.

3.1

odorization

addition of odorants, normally intensely smelling organic sulfur compounds, to natural gas (normally odourless) to allow the recognition of gas leaks by smell at very low concentration (before a build up to a dangerous gas in air concentration can occur)

Note 1 to entry: Adapted from ISO 14532.

Note 2 to entry: Natural gas is normally odourless. The addition of an odorant to the gas fed into the distribution system for safety reasons permits the detection of the gas by smell at very low concentrations.

3.2

odorant

intensely smelling organic chemical or combination of chemicals added to natural gas at low concentration and capable of imparting a characteristic and distinctive (usually disagreeable) warning odour so gas leaks can be detected at concentrations below their lower flammability limit

[SOURCE: ISO 14532]