

STN	Skvapalnené ropné plyny Určovanie rozpustených zvyškov Metóda vysokoteplotnej plynovej chromatografie	STN EN 15470 65 6474
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Liquefied petroleum gases - Determination of dissolved residues - High temperature Gas chromatographic method

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. 12/17

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EUROPEAN STANDARD

EN 15470

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 15470:2007

English Version

Liquefied petroleum gases - Determination of dissolved residues - High temperature Gas chromatographic method

Gaz de pétrole liquéfié - Détermination des résidus dissous - Méthode par chromatographie en phase gazeuse, à haute température

Flüssiggas - Bestimmung der gelösten Rückstände - Hochtemperatur-Gaschromatographie-Verfahren

This European Standard was approved by CEN on 24 April 2017.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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European foreword

This document (EN 15470:2017) has been prepared by Technical Committee CEN/TC 19 "Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin", the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by January 2018, and conflicting national standards shall be withdrawn at the latest by January 2018.

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.

This document supersedes EN 15470:2007.

The main changes in this version being:

- a) numerous changes of both technical and editorial nature have been made to add clarity to the text;
- b) clarification that the use of a drying agent in the desiccator is not recommended;
- c) the description of the equipment used has been improved;
- d) Formula (1) has been corrected for an error;
- e) small changes in the vent line (6.6) and the flasks (6.7) in order to improve the technical safety of the method;
- f) information contained in Annex B that deemed to be obsolete has been removed.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

1 Scope

This European Standard specifies a method for determining the dissolved residual matter in liquefied petroleum gases (LPG), in the range of 40 mg/kg to 100 mg/kg. Higher concentrations can be determined by adjusting the sample size.

The dissolved residue is the amount of organic compounds which is detectable by gas chromatography after evaporation of the sample at ambient temperature and then in an oven at 105 °C.

This method is not suitable for detecting solid materials or for possibly high molar mass polymers (>1 000 g/mol).

From the analysis of a limited LPG sample size (50 g to 75 g) this method allows obtaining information on the potential origin of the residue (gasoil, lubricants, plasticizers, etc.).

The precision data of the method have been determined from 20 mg/kg to 100 mg/kg. For a higher content of residue, the precision has not been tested.

NOTE An alternative European Standard, EN 15471 [1], specifies a gravimetric method.

WARNING — The use of this standard can involve hazardous materials, operations and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of users of this standard to take appropriate measures to ensure the safety and health of personnel prior to application of the standard, and fulfil statutory and regulatory requirements for this purpose.

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.

EN ISO 4257, *Liquefied petroleum gases - Method of sampling (ISO 4257:2001)*

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