# Toornafta ja kütteõlid. Sette määramine. Ekstraktsioonimeetod

Crude petroleum and fuel oils - Determination of AN ORNORAL AND THIS sediment - Extraction method



# EESTI STANDARDI EESSÕNA

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 3735:2000 sisaldab Euroopa standardi EN ISO 3735:1999 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 3735:2000 consists of the English text of the European standard EN ISO 3735:1999.

Käesolev dokument on jõustatud 18.02.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 18.02.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

## Käsitlusala:

Käesolev standard esitab toornaftas ja kütteõlides sette määramise ekstraktsioonmeetodi toluooli abil Scope:

ICS 75.040, 75.160.20

**Võtmesõnad:** ekstraktsioonanalüüs, kütteõli, mõõtmine, naftasaadused, setted, testimine, toorõli

# **EUROPEAN STANDARD** NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 3735** 

March 1999

ICS 75.200; 75.160.00

Supersedes EN ISO 3735: 1995.

Ref. No. EN ISO 3735: 1999 E

#### **English version**

# Crude petroleum and fuel oils

Determination of sediment - Extraction method (ISO 3735: 1999)

Pétrole brut et fuel-oils -Détermination de la teneur en sédiments - Méthode par extraction (ISO 3735: 1999)

Rohöl und Heizöle – Bestimmung des Gehalts an Sediment - Extraktionsverfahren (ISO 3735 : 1999)

This European Standard was approved by CEN on 1999-03-03.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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#### **Foreword**

International Standard

ISO 3735: 1999 Crude petroleum and fuel oils - Determination of sediment - Extraction method,

which was prepared by ISO/TC 28 'Petroleum products and lubricants' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 19 'Petroleum products, lubricants and related products', the Secretariat of which is held by NNI, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by September 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

### **Endorsement notice**

The text of the International Standard ISO 3735: 1999 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

Thernations.

Contribution of the contribution

WARNING — The use of this International Standard may involve hazardous materials, operations and equipment. This International Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this International Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

This International Standard specifies a method for the determination of sediment in crude petroleum and fuel oils by extraction with toluene. The precision applies to a range of sediment levels from 0,01 % (m/m) to 0,40 % (m/m), although higher levels may be determined.

If this International Standard is applied to crude petroleum samples containing significant amounts of salts, an overestimation of the sediment content may be obtained because a proportion of the inorganic salts may be trapped in the extraction thimble. This problem is generally not significant for crude petroleum samples containing less than 0,1 % (m/m) total

For the purposes of this international Standard, the terms "% (m/m)" and "% (V/V)" are used to represent the mass NOTE 2 and volume fractions of materials, respectively.

### 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 1773:1997, Laboratory glassware — Narrow-necked boiling flasks.

ISO 3170:1988, Petroleum liquids — Manual sampling.

ISO 3171:1988, Petroleum liquids — Automatic pipeline sampling.

ISO 4793:1980, Laboratory sintered (fritted) filters — Porosity grading, classification and designation.

ISO 5272:1979, Toluene for industrial use — Specifications.
3 Principle
A test portion, in a refractory thimble, is extracted with hot toluene until the residue reaches constant mass. 50 OT 175