

**Naftasaadused ja vanaõli. PSB-de ja sarnaste
saaduste määramine. Osa 1: Valitud PCB
homoloogide gaasikromatograafilise (GC)
lahutamise ja määramise elektronihaarde-detektori
kasutamisel**

Petroleum products and used oils - Determination
PCBs and related products - Part 1: Separation and
determination of selected PCB congeners by gas
chromatography (GC) using an electron capture
detector (ECD)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12766-1:2005 sisaldab Euroopa standardi EN 12766-1:2000 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 12.09.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 22.03.2000.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12766-1:2005 consists of the English text of the European standard EN 12766-1:2000.

This standard is ratified with the order of Estonian Centre for Standardisation dated 12.09.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 22.03.2000.

The standard is available from Estonian standardisation organisation.

ICS 75.080, 75.100

Võtmesõnad: määrdeained, naftasaadused, vanaõli

Standardite reprodutseerimis- ja levitamiseõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
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ICS 75.080; 75.100

English version

Petroleum products and used oils

Determination of PCBs and related products

Part 1: Separation and determination of selected PCB congeners by gas chromatography (GC) using an electron capture detector (ECD)

Produits pétroliers et huiles usagées –
Détermination des PCBs et produits
connexes – Partie 1: Séparation et
dosage d'une sélection de congénères
de PCB par chromatographie en
phase gazeuse (CG) avec utilisation
d'un détecteur à capture d'électrons
(ECD)

Mineralölerzeugnisse und
Gebrauchtöle – Bestimmung von
PCBs und verwandten Produkten –
Teil 1: Trennung und Bestimmung
von ausgewählten PCB-Congeneren
mittels Gaschromatographie (GC)
unter Verwendung eines Elektronen-
einfang-Detektors (ECD)

This European Standard was approved by CEN on 2000-01-20.

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.

CEN

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

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

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 19 "Petroleum products, lubricants and related products", the secretariat of which is held by NNI.

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 September 2000, and conflicting national standards shall be withdrawn at the latest by September 2000.

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

In this standard, annexes A and B are normative, annexes C, D and E are informative.

This European Standard is one of a series of standards as listed below.

EN 12766, *Petroleum products and used oils - Determination of PCBs¹⁾ and related products*

Part 1: Separation and determination of selected PCB congeners by gas chromatography (GC) using an electron capture detector (ECD)

Part 2: Quantification of PCB content in analyzed samples²⁾

Part 3: Determination and calculation of PCB related products³⁾

¹⁾ PCBs as defined in:

Council directive 95/59/EC of 1996-09-16 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls. The definition includes PCBs proper, PCTs and also PCBTs (polychlorinated benzyltoluenes), tradename "Ugilec".

²⁾ Part 2 of EN 12766 is under development.

³⁾ Part 3 of EN 12766 is under development

1 Scope

This European Standard specifies a method to determine the concentration of up to 12 individual or defined unresolved small groups of polychlorinated biphenyl (PCB) congeners in petroleum products and related materials by means of a specified gaschromatographic separation procedure. The gas chromatographic separation is valid for the different quantification procedures described in Part 2 of this European Standard.

This European Standard is applicable to unused, used and treated (e.g. dechlorinated) petroleum products including synthetic lubricating oils, and to petroleum products and synthetic lubricating oils suitably recovered from other materials, e.g. from waste materials.

NOTE 1 The nominal application range does depend on precision, the lower limit per single congener is about 0,2 mg/kg.

NOTE 2 For the purposes of this European Standard, the terms “% (V/V)” and “% (m/m)” are used to represent respectively the mass fraction and the volume fraction.

This European Standard does not apply to insulating liquids, for which a different method (EN 61619) is available. Depending on current legislation, it may be necessary to measure either total or individual PCB congeners. EN 61619 may be followed as an alternative method for the determination of total PCBs, using the clean-up stage described in clause 8 of this standard.

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 the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2 Normative references

This European standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment of revision. For undated references the latest edition of the publication referred to applies.

EN ISO 3696, *Water for analytical laboratory use - Specification and test methods*. (ISO 3696:1987)

EN ISO 3170, *Petroleum liquids - Manual sampling*. (ISO 3170:1988, including Amendment 1:1998)

EN ISO 3171, *Petroleum liquids - Automatic pipeline sampling*. (ISO 3171:1988)

3 Terms and definitions

For the purposes of part 1 of this standard, the following definitions apply:

3.1

polychlorinated biphenyl

PCB

biphenyl substituted by one to 10 chlorine atoms

NOTE For legal purposes, congeners with one, two or ten chlorine atoms can be excluded from this definition.

3.2

congener

all the chlorine derivatives of biphenyl, irrespective of the number of chlorine atoms

NOTE There are 209 possible PCB congeners. The congener numbers (see annex C) are for easy identification; they do not represent the order of chromatographic elution.