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Water quality - Determination of hydrocarbon oil index - Part 2: Method using solvent extraction and gas chromatography (ISO 9377-2:2000)

Wasserbeschaffenheit - Bestimmung des Kohlenwasserstoff-Index - Teil 2: Verfahren nach Lösemittelextraktion und Gaschromatographie (ISO 9377-2:2000)

Qualité de l'eau - Détermination de l'indice hydrocarbure - Partie 2: Méthode par extraction au solvant et chromatographie en phase gazeuse (ISO 9377-2:2000)

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**Ta slovenski standard je istoveten z: EN ISO 9377-2:2000**

**ICS:**

13.060.50 Úl^ã\ ææ[ á^Á æ^ { ä } ^ Examination of water for  
 • } [ çã chemical substances

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 9377-2**

October 2000

ICS 13.060.50

English version

**Water quality - Determination of hydrocarbon oil index - Part 2:  
Method using solvent extraction and gas chromatography (ISO  
9377-2:2000)**

Qualité de l'eau - Détermination de l'indice hydrocarbure -  
Partie 2: Méthode par extraction au solvant et  
chromatographie en phase gazeuse (ISO 9377-2:2000)

Wasserbeschaffenheit - Bestimmung des  
Kohlenwasserstoff-Index - Teil 2: Verfahren nach  
Lösemittelextraktion und Gaschromatographie (ISO 9377-  
2:2000)

This European Standard was approved by CEN on 4 October 2000.

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 Management Centre 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

**CORRECTED 2001-03-28**

## Foreword

The text of the International Standard ISO 9377-2:2000 has been prepared by Technical Committee ISO/TC 147 "Water quality" in collaboration with Technical Committee CEN/TC 230 "Water analysis", the secretariat of which is held by DIN.

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 April 2001, and conflicting national standards shall be withdrawn at the latest by April 2001.

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.

## iTeh STANDARD PREVIEW (standardbitchai)

The text of the International Standard ISO 9377-2:2000 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

**Annex ZA (normative)**  
**Normative references to international publications  
with their relevant European publications**

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 or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 5667-3	1994	Water quality - Sampling - Part 3: Guidance on the preservation and handling of samples	EN ISO 5667-3	1995

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# INTERNATIONAL STANDARD

**ISO**  
**9377-2**

First edition  
2000-10-15

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## Water quality — Determination of hydrocarbon oil index —

Part 2:

### Method using solvent extraction and gas chromatography

iTeh **STANDARD PREVIEW**  
(standards.iteh.ai)

*Qualité de l'eau — Détermination de l'indice hydrocarbure —*

*Partie 2: Méthode par extraction au solvant et chromatographie en phase gazeuse*

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Reference number  
ISO 9377-2:2000(E)

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## ISO 9377-2:2000(E)

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Printed in Switzerland



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## ISO 9377-2:2000(E)

## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this part of ISO 9377 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 9377-2 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 2, *Physical, chemical and biochemical methods*.

ISO 9377 consists of the following parts, under the general title *Water quality — Determination of hydrocarbon oil index*:

— Part 1: *Method using solvent extraction and gravimetry*

— Part 2: *Method using solvent extraction and gas chromatography*

Annexes A, B and C of this part of ISO 9377 are for information only.

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# Water quality — Determination of hydrocarbon oil index —

## Part 2:

## Method using solvent extraction and gas chromatography

### 1 Scope

This part of ISO 9377 specifies a method for the determination of the hydrocarbon oil index in waters by means of gas chromatography. The method is suitable for surface water, waste water and water from sewage treatment plants and allows the determination of a hydrocarbon oil index in concentrations above 0,1 mg/l.

The method is not applicable to the quantitative determination of the content of volatile mineral oil. However, on the basis of the peak pattern of the gas chromatogram, certain qualitative information on the composition of the mineral oil contamination can be derived.

NOTE 1 For the determination of the mineral-oil content of soils and sediment, see ISO/TR 11046.

NOTE 2 The mass concentration of animal and vegetable fat in the test sample should not exceed 150 mg/l, because at higher values the adsorption capacity of the clean-up column packing may not be sufficient.

NOTE 3 In the case of highly polluted waste water, especially if containing a high amount of surfactants, a loss in recovery may occur.

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### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 9377. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 9377 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 5667-3:1994, *Water quality — Sampling — Part 3: Guidance on the preservation and handling of samples.*

ISO 8466-1:1990, *Water quality — Calibration and evaluation of analytical methods and estimation of performance characteristics — Part 1: Statistical evaluation of the linear calibration function.*

### 3 Term and definition

For the purposes of this part of ISO 9377, the following term and definition applies.