INTERNATIONAL STANDARD

ISO 9377-2

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Water quality — Determination of hydrocarbon oil index —

Part 2: Method using solvent extraction and gas chromatography

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

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

Reference number
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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

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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.

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.

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.