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Water quality — Determination of selected organic nitrogen and phosphorus compounds — Gas chromatographic methods

Qualité de l'eau — Dosage de certains composés organiques azotés et phosphorés sélectionnés — Méthodes par chromatographie en phase gazeuse

Reference number
ISO 10695:2000(E)

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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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 10695 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 2, *Physical, chemical and biochemical methods*.

Annexes A, B, C and D of this International Standard are for information only.

Water quality — Determination of selected organic nitrogen and phosphorus compounds — Gas chromatographic methods

WARNING — This International Standard makes use of flammable and toxic organic solvents and some toxic organic and phosphorus compounds. Observe the safety regulations in effect.

1 Scope

This International Standard specifies two methods for the determination of certain organic nitrogen and phosphorus compounds in waters by gas chromatography (see Table 1).

The methods may be extended to include additional substances, provided the methods are validated for each individual case.

Clause 3 describes the liquid/liquid extraction method, which is applicable to samples of drinking waters, ground waters, surface waters and waste waters containing up to 0,05 g/l of suspended solids. In the presence of organic matter, suspended matter and colloids, interferences are more numerous and consequently the detection limits of this method can be higher.

NOTE Because of the very low concentrations normally present in the waters, the problem of contamination is extremely important. The lower the level measured, the more precautions have to be observed.

Clause 4 describes the liquid/solid extraction method which is applicable to samples of ground water, surface water and drinking water containing mass concentrations of about $\geqslant 0{,}05$ µg/l. Interferences occurring with the examination of some types of surface water can prevent the application of this method.

Detection limits are given for information in annex A.

NOTE When applying this International Standard, the guide on analytical quality control for water analysis (see ISO/TR 13530) should be followed.