

INTERNATIONAL
STANDARD

ISO
10304-2

First edition
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**Water quality — Determination of
dissolved anions by liquid chromatography
of ions —**

Part 2:

Determination of bromide, chloride, nitrate,
nitrite, orthophosphate and sulfate in waste
water

*Qualité de l'eau — Dosage des anions dissous par chromatographie des
ions en phase liquide —*

*Partie 2: Dosage des ions bromure, chlorure, nitrate, nitrite,
orthophosphate et sulfate dans les eaux usées*



Reference number
ISO 10304-2:1995(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.

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.

International Standard ISO 10304-2 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 2, *Physical, chemical, biochemical methods*.

ISO 10304 consists of the following parts, under the general title *Water quality — Determination of dissolved anions by liquid chromatography of ions*:

- *Part 2: Determination of bromide, chloride, nitrate, nitrite, orthophosphate and sulfate in waste water*
- *Part 3: Determination of chromate, iodide, sulfite, thiocyanate and thiosulfate*
- *Part 4: Determination of chlorate, chloride and chlorite in water with low contamination*

The title of ISO 10304-1:1992 is *Water quality — Determination of dissolved fluoride, chloride, nitrite, orthophosphate, bromide, nitrate and sulfate ions, using liquid chromatography of ions — Part 1: Method for water with low contamination*

Annex A of this part of ISO 10304 is for information only.

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Introduction

The essential minimum requirements of an ion chromatographic system to be applied within the scope of this part of ISO 10304 are the following:

Resolution power

It is essential that the peak resolution R does not fall below 1,3 for the anion to be determined and the nearest peak (see clause 6 and figure 3).

Method of detection

- a) Measurement of the electrical conductivity with or without a suppressor device, respectively.
- b) Photometric measurement (UV/VIS), directly or indirectly.

Applicability of the method

Working ranges are according to table 1.

Calibration

Calibration and determination of the linear working range. Use of the method of standard addition for special cases of application (see clause 9).

Quality control of the analytical method

Validity check of the calibration function (see 8.3). Replicate determinations if necessary.

The diversity of the appropriate and suitable assemblies and the procedural steps depending on them (e.g. composition of the mobile phases) permit a global description only.

For further information on the analytical technique, refer to ISO 10304-1.