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SANS 3696:1987
Edition 1 and nat. amdt 1

ISO 3696:1987
Edition 1

Any reference to SABS ISO 3696 is deemed
to be a reference to this standard
(Government Notice No. 1373 of 8 November 2002)

SOUTH AFRICAN NATIONAL STANDARD

Water for analytical laboratory use — Specification and test methods

This national standard is the identical implementation of ISO 3696:1987 and is adopted with the permission of the International Organization for Standardization.

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ISO 3696:1987
Edition 1

Table of changes

Change No.	Date	Scope
Nat. amdt 1	2006	Amended to change the designation from SABS to SANS, with no technical changes.

National foreword

This South African standard was approved by National Committee SABS SC 147A, *Water – Water sampling and analysis*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This standard was published in November 2006. This SANS edition is technically identical to SABS edition 1 (SABS ISO 3696:1987), with the addition of national amendment 1.

Reaffirmed and reprinted in March 2012.
This standard will be reviewed every five years
and be reaffirmed, amended, revised or withdrawn.

INTERNATIONAL STANDARD

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3696
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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Water for analytical laboratory use — Specification and test methods

Eau pour laboratoire à usage analytique — Spécification et méthodes d'essai

Reference number
ISO 3696 : 1987 (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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 3696 was prepared by Technical Committee ISO/TC 47, *Chemistry*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Printed in Switzerland

INTERNATIONAL STANDARD ISO 3696 : 1987 (E)

Water for analytical laboratory use — Specification and test methods

1 Scope and field of application

This International Standard specifies the requirements and corresponding test methods for three grades of water for laboratory use for the analysis of inorganic chemicals.

It is not applicable to water for organic trace analysis, to water for the analysis of surface active agents, or to water for biological or medical analysis.

NOTE — For some purposes (for example for certain analytical methods or for tests in which the water is required to be sterile or pyrogen-free or of specified surface tension), additional specific tests and further purification or other treatment may be necessary.

2 Description

The material shall be a clear, colourless liquid as assessed by visual inspection.

3 Classification

This International Standard covers three grades of water as follows :

Grade 1

Essentially free from dissolved or colloidal ionic and organic contaminants and suitable for the most stringent analytical requirements including those of high-performance liquid chromatography; should be produced by further treatment of grade 2 water (for example reverse osmosis or deionization followed by filtration through a membrane filter of pore size 0,2 µm to remove particulate matter or redistillation from a fused silica apparatus).

Grade 2

Very low in inorganic, organic or colloidal contaminants and suitable for sensitive analytical purposes, including atomic absorption spectrometry (AAS) and the determination of constituents in trace quantities; should be produced, for example, by multiple distillation, or by deionization or reverse osmosis followed by distillation.

Grade 3

Suitable for most laboratory wet chemistry work and preparation of reagents solutions; should be produced, for example, by single distillation, by deionization, or by reverse osmosis. Unless otherwise specified, it should be used for ordinary analytical work.

NOTE — It is assumed that the initial feed stock water is potable and reasonably pure. If it is heavily contaminated in any respect, some pretreatment may be necessary.

4 Requirements

The material shall comply with the appropriate requirements of the table. Testing for compliance shall be carried out by means of the methods specified in clause 7.