



NSAI
Standards

Irish Standard
I.S. EN ISO 7887:2011

Water quality - Examination and determination of colour (ISO 7887:2011)

I.S. EN ISO 7887:2011

Incorporating amendments/corrigenda/National Annexes issued since publication:

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Údarás um Chaighdeáin Náisiúnta na hÉireann

English Version

Water quality - Examination and determination of colour (ISO 7887:2011)

Qualité de l'eau - Examen et détermination de la couleur
(ISO 7887:2011)

Wasserbeschaffenheit - Untersuchung und Bestimmung
der Färbung (ISO 7887:2011)

This European Standard was approved by CEN on 14 December 2011.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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Foreword

This document (EN ISO 7887:2011) 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of an identical text or by endorsement, at the latest by June 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 7887:1994.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 7887:2011 has been approved by CEN as a EN ISO 7887:2011 without any modification.

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I.S. EN ISO 7887:2011
**INTERNATIONAL
STANDARD**

**ISO
7887**

Third edition
2011-12-15

**Water quality — Examination and
determination of colour**

Qualité de l'eau — Examen et détermination de la couleur



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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 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 7887 was prepared by Technical Committee ISO/TC 147, *Water quality*, Subcommittee SC 2, *Physical, chemical and biochemical methods*.

This third edition cancels and replaces the second edition (ISO 7887:1994), which has been technically revised.

Water quality — Examination and determination of colour

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

IMPORTANT — It is absolutely essential that tests conducted in accordance with this International Standard be carried out by suitably qualified staff.

1 Scope

This International Standard specifies four different methods, designated A to D, for the examination of colour.

The previously most employed method for assessment of water colour in water treatment plants, limnological surveys, etc. was based on the hexachloroplatinate scale (Reference [1]). Methods C and D are harmonized with this traditional procedure (References [2][3]).

Method A involves examination of apparent colour by visually observing a water sample in a bottle. This gives only preliminary information, for example for use in field work. Only the apparent colour can be reported.

Method B involves determination of the true colour of a water sample using optical apparatus and is applicable to raw and potable water and to industrial water of low colour. A subclause on interferences is included.

Method C involves determination of the true colour of a water sample using optical apparatus for comparison with hexachloroplatinate concentration at wavelength, $\lambda = 410$ nm. A subclause on interferences is included.

Method D involves determination of colour by visual comparison with hexachloroplatinate standard solutions and can be applied to raw and drinking water. A subclause on interferences is included.

Methods A and B are appropriate if the colour hue of the sample differs from the hue of the matching solution.

NOTE 1 Under certain circumstances, strongly coloured water samples require dilution before examination or determination. However, this can alter the physical-chemical conditions leading to a change in colour.

NOTE 2 An internal quality control procedure for all methods specified in this International Standard is given in Annex A. Precision data are given in Annex B.

When stating the result, the procedure used (methods A to D) is also recorded.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 5667-3, *Water quality — Sampling — Part 3: Preservation and handling of water samples*

ISO 10523, *Water quality — Determination of pH*

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