

Water quality —

Part 2: Physical, chemical and biochemical methods —

Section 2.14 Determination of biochemical oxygen demand after 5 days (BOD₅): dilution and seeding method

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Environment and Pollution Standards Policy Committee (EPC/-) to Technical Committee EPC/44, upon which the following bodies were represented:

- Association of Consulting Scientists
- British Association for Chemical Specialities
- British Gas plc
- Chemical Industries Association
- Department of the Environment for Northern Ireland
- Department of the Environment — Water Directorate
- Department of Trade and Industry — Laboratory of the Government Chemist
- Electricity Supply Industry in England and Wales
- Industry Water Society
- Insitiute of Petroleum
- Insitution of Gas Engineers
- Insitution of Water and Environmental Management
- National Rivers Authority
- Royal Insitiute of Public Health and Hygiene
- Royal Society of Chemistry
- Scottish Association of Directors of Water and Sewerage Services
- Soap and Detergent Industry Association
- Water Companies Association
- Water Research Centre
- Water Services Association of England and Wales

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National foreword

This Section of BS 6068, which has been prepared under the direction of the Environment and Pollution Standards Policy Committee is identical with ISO 5815:1989 “Water quality — Determination of biochemical oxygen demand after 5 days (BOD₅) — Dilution and seeding method”.

The international standard was prepared by subcommittee 2, Physical, chemical and biochemical methods of Technical Committee 147, Water quality, of the International Organization for Standardization (ISO) with the active participation and approval of the UK.

This Section of BS 6068 is a revision of the 1984 edition of BS 6068-2.14, which is withdrawn and which was technically related but not equivalent to ISO 5814:1983. There are a number of minor technical changes between this revision and BS 6068-2.14:1984, as follows:

- a) settled effluent can be used as the seeding water (see 5.1);
- b) minor changes in the preparation of the seeded dilution water (see 5.4);
- c) the use of allythiourea as a nitrification suppressant has been brought into the main body of the text (see 8.2.2);
- d) reference to methods for the measurement of chlorine has been included (see 8.1.2).

NOTE The tests described in this Section of BS 6068 should only be carried out in laboratories with suitable facilities and by suitable qualified persons with an appropriate level of chemical expertise. Standard chemical procedure should be followed throughout.

BS 6068 is being published in a series of Parts sub divided into Sections that will generally correspond to particular international standards. Sections are being, or will be, published in Parts 1 to 7, which together with Part 0, are listed below.

- Part 0: Introduction;
- Part 1: Glossary;
- Part 2: Physical, chemical and biochemical methods;
- Part 3: Radiological methods;
- Part 4: Microbiological methods;
- Part 5: Biological methods;
- Part 6: Sampling;
- Part 7: Precision and accuracy.

Cross-references

International standard	Corresponding British Standard
	BS 6068 Water quality
ISO 5813-1983	Section 2.3:1984 Determination of dissolved oxygen: iodometric method (Identical)
ISO 6107/2-1982	Section 1.2:1982 Additional terms relating to types of water, and treatment and storage of water and waste water, and terms used in sampling and analysis of water (Identical)
ISO 7393/1-1985	Section 2.25:1986 Method for determination of free chlorine and total chlorine: titrimetric method using N,N-diethyl-1,4-phenylenediamine (Identical)
ISO 7393/2-1985	Section 2.26:1986 Method for determination of free chlorine and total chlorine: colorimetric method using N,N-diethyl-1,4-phenylenediamine, for routine control purposes

The Technical Committee has reviewed the provisions of ISO 5814, to which reference is made in 8.4, and has decided that they are acceptable for use in conjunction with this standard.

Additional information. The reagents mentioned in 5.8 could, more correctly, be identified as D-glucose and L-glutamic acid.

Typographical error. In the penultimate line of note 2 to 8.2.2, “chromate” should be read as ‘dichromate’.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 6, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.