

Specification for

Industrial oxygen

Confirmed
December 2011

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Chemicals Standards Policy Committee (CIC/-) to Technical Committee CIC/19, upon which the following bodies were represented:

- Brewers Society
- British Compressed Gases Association
- British Soft Drinks Association Ltd.
- Ministry of Defence

This British Standard, having been prepared under the direction of the Chemicals Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 February 1993

© BSI 07-1999

First published November 1968
Second edition February 1993

The following BSI references relate to the work on this standard:
Committee reference CIC/19
Draft for comment 92 91608 DC

ISBN 0 580 21536 9

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 References	1
3 Description	1
4 Sampling	1
5 Oxygen content	1
6 Carbon monoxide and carbon dioxide content	1
7 Total hydrocarbons content	1
8 Water content	1
9 Containers	1
10 Labelling	1
Annex A (informative) Safety considerations for the handling of oxygen	2
Annex B (normative) Method for the determination of oxygen content	2
Annex C (normative) Method for the determination of carbon monoxide and carbon dioxide content	3
Annex D (normative) Method for the determination of total hydrocarbons content	4
Annex E (normative) Method for the determination of water content	5
Figure B.1 — Dumb-bell system: forces within the cell	2
Figure B.2 — Measuring cell configuration	3
Figure B.3 — Typical analyser configuration (electronic)	3
Figure D.1 — Flame ionization detector (schematic)	4
List of references	Inside back cover

Foreword

This British Standard has been prepared under the direction of the Chemicals Standards Policy Committee. BS 4364:1968 was withdrawn in 1988 as obsolete. At about the same time an EC draft Directive on Food Additives (including gases) was issued, requiring standards of purity of additives to be established in the implementing legislation. This, together with representation from numerous concerns, in particular the welding industry, indicated a need for a revised British Standard to be prepared.

This standard represents a complete revision of BS 4364:1968, in order to provide a practical standard for both producers and users of industrial oxygen. Current analytical methods are referred to in order to present a readily reproducible system of checking compliance with the requirements of this standard.

Annex A is included as a reminder that safety considerations are paramount. Full details of sampling for analytical purposes are included in BS 5309-2, which includes references to compressed and liquefied gases.

This standard is one of a pair prepared in parallel, the other being BS 4366:1993 *Specification for industrial nitrogen*.

Reference to this standard may be made:

- by a purchaser of products;
- by a supplier when specifying products offered;
- by consumer interests and legislative bodies.

The role of a purchaser in monitoring a supplier's compliance with the requirements of this standard may be fulfilled by a third party, such as an accreditation or certification body.

Product certification. Users of this British Standard are advised to consider the desirability of third party certification of product conformity with this British Standard based on testing and continuing product surveillance which may be coupled with assessment of a supplier's quality systems against the appropriate Part of BS 5750.

Enquiries as to the availability of third party certification schemes are forwarded by BSI to the Association of Certification Bodies. If a third party certification scheme does not already exist, users should consider approaching an appropriate body from the list of Association members.

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 and ii, 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.