

Characterization of air quality

Part 2. Glossary

Confirmed April 2010

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/35, upon which the following bodies were represented:

Association of Consulting Scientists
British Cement Association
British Coal Corporation
Combustion Engineering Association
Department of Health
Department of the Environment (Her Majesty's Inspectorate of Pollution)
Department of Trade and Industry (Laboratory of the Government Chemist)
Department of Trade and Industry (Warren Spring Laboratory)
Engineering Equipment and Materials Users' Association
European Resin Manufacturers' Association
GAMBICA (BEAMA Ltd.)
Health and Safety Executive
Institute of Petroleum
Institution of Environmental Health Officers
National Society for Clean Air
Royal Society of Chemistry

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

BCIRA
British Steel plc
Institute of Occupational Medicine

This British Standard, having been prepared under the direction of the Environment and Pollution Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on
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The following BSI references relate to the work on this standard:
Committee reference EPC/35
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Amendments issued since publication

Amd. No.	Date	Text affected

National foreword

This Part of BS 6069 has been prepared under the direction of the Environment and Pollution Standards Policy Committee and is identical with ISO 4225 *Air quality — General aspects — Vocabulary*. The international standard was prepared by Technical Committee 146, Air quality, Subcommittee 4, General aspects, of the International Organization for Standardization (ISO) with the active participation and approval of the UK.

This Part of BS 6069 supersedes BS 6069 : Part 2 : 1983, which is withdrawn. The main elements of the revision are changes as follows:

- a) changes to clause numbering;
- b) considerable extension in the number of terms and definitions;
- c) inclusion of a normative reference;
- d) inclusion of parallel French text for ease of reproduction.

In accordance with common practice in ISO, as the English terms in this standard are arranged in alphabetical order, the ISO text includes only a French language alphabetical index.

BS 6069 is being published in a series of Parts and Sections that will generally correspond to particular international standards arising from the UK participation in the work of ISO/TC 146. This Part of BS 6069 is one of several relating to characterization of air quality. Topics relating to other aspects of air quality characterization will be published as further Parts or Sections of BS 6069.

Methods for the determination of particular constituents of ambient air are being published as Parts of BS 1747 *Methods for the measurement of air pollution*.

Cross-references

The Technical Committee has reviewed the provisions of the draft ISO 9169, to which normative reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

When ISO 9169 is published, it is intended to implement it as an identical British Standard.

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

Air quality — General aspects — Vocabulary

1 Scope

This International Standard explains the meanings, in English and French, of a selection of terms commonly used in connection with the sampling and measurement of gases, vapours and particles for the determination of air quality.

The terms are arranged in alphabetical order in English. An alphabetical index of the French terms is also given

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 9169:—¹⁾, *Air quality — Determination of performance characteristics of measurement methods.*

1) To be published.

Qualité de l'air — Aspects généraux — Vocabulaire

1 Domaine d'application

La présente Norme internationale explique, en anglais et en français, un choix de termes couramment utilisés pour l'échantillonnage et la mesure des gaz, des vapeurs et des particules, pour la détermination de la qualité de l'air.

Les termes définis sont classés par ordre alphabétique anglais. Un répertoire alphabétique des termes français est également donné.

2 Référence normative

La norme suivante contient des dispositions qui, par suite de la référence qui en est faite, constituent des dispositions valables pour la présente Norme internationale. Au moment de la publication, l'édition indiquée était en vigueur. Toute norme est sujette à révision et les parties prenantes des accords fondés sur la présente Norme internationale sont invitées à rechercher la possibilité d'appliquer l'édition la plus récente de la norme indiquée ci-après. Les membres de la CEI et de l'ISO possèdent le registre des Normes internationales en vigueur à un moment donné.

ISO 9169:—¹⁾, *Qualité de l'air — Détermination des caractéristiques de performance des méthodes de mesurage.*

1) À publier.

3 Terms and definitions

3.1 abatement: Reduction or lessening as opposed to elimination of a type of discharge or pollutant.

3.2 aerosol: Suspension in a gaseous medium of solid particles, liquid particles or solid and liquid particles having a negligible falling velocity.

3.3 air pollutant: Any material emitted into the atmosphere either by human activity or natural processes and adversely affecting man or the environment.

3.4 air pollution: Usually the presence of substances in the atmosphere resulting either from human activity or natural processes, present in sufficient concentration, for a sufficient time and under circumstances such as to interfere with comfort, health or welfare of persons or the environment.

3.5 Aitken nuclei: Small particles less than 0,1 µm in diameter which normally exist in the atmosphere in numbers varying from a few thousand to a few hundred thousand per millilitre. They are emitted into the atmosphere by anthropogenic and natural processes. They are also formed in the atmosphere by physical and chemical processes.

3.6 ambient air: Outdoor air to which people, plants, animals or material may be exposed.

3.7 ambient air quality: State of the ambient air as indicated by the degree of contamination.

3.8 ambient air quality standard: Specified quality of the ambient air having a legal status, frequently defined statistically by setting a limit to the concentration of an air pollutant over a specified averaging time.

3.9 arrester: Equipment designed to remove particles from a gaseous medium.

3.10 ash: Solid residue remaining after combustion of carbonaceous materials. Ash may contain incompletely burned fuel although, for analytical purposes, complete combustion is often assumed.

3.11 atmosphere (of the Earth): Entire mass of air which surrounds the Earth.

3.12 averaging time: Interval of time over which the air quality has been expressed as an average (with reference to methods of measurement, see ISO 9169).

3 Termes et définitions

3.1 réduction: Diminution par opposition à l'élimination d'un type de décharge ou de polluant.

3.2 aérosol: Suspension, dans un milieu gazeux, de particules solides ou liquides, ou les deux, présentant une vitesse de chute négligeable.

3.3 polluant de l'air: Toute substance émise dans l'atmosphère, soit par une activité humaine, soit par un processus naturel, qui affecte l'homme ou l'environnement.

3.4 pollution de l'air: Signifie communément la présence, dans l'atmosphère, de substances résultant de l'activité humaine ou de processus naturels, en concentration suffisante pendant un temps suffisant et dans des circonstances telles qu'elles affectent le confort, la santé ou le bien être des personnes ou l'environnement.

3.5 noyaux d'Aitken: Petites particules d'un diamètre inférieur à 0,1 µm qui se trouvent normalement dans l'atmosphère à des concentrations variant de quelques milliers à quelques centaines de milliers par millilitre. Elles sont émises dans l'atmosphère par des processus anthropogéniques ou des processus naturels.

3.6 air ambiant: Air extérieur auquel peuvent être exposés les personnes, les plantes, les animaux et les matériaux.

3.7 qualité de l'air ambiant: État de l'air ambiant comme indiqué par le degré de contamination.

3.8 norme de qualité de l'air ambiant: Qualité de l'air ambiant spécifiée possédant un statut légal, souvent définie statistiquement par la fixation d'une limite à la concentration d'un polluant de l'air par rapport à une durée moyenne spécifiée.

3.9 séparateur: Appareil conçu pour enlever les particules d'un milieu gazeux.

3.10 cendre: Résidu solide restant après combustion de matériaux carbonés. Les cendres peuvent contenir du combustible incomplètement brûlé, bien que pour les besoins analytiques, on supposera souvent qu'il y a eu combustion complète.

3.11 atmosphère (de la terre): Totalité de la masse d'air qui entoure la terre.

3.12 temps moyen: Intervalle de temps pendant lequel la qualité de l'air a été exprimée sous forme de moyenne (en référence aux méthodes de mesurage, voir ISO 9169).