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## Workplace air — Terminology

*Qualité de l'air — Terminologie*



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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 146, *Air quality*, Subcommittee SC 2, *Workplace atmospheres*.

## Introduction

The health of workers in many industries is at risk through exposure by inhalation of chemical and biological agents. Industrial hygienists and other public health professionals need to determine the effectiveness of measures taken to control workers' exposure and this is generally achieved by making workplace air measurements.

Many terms that are commonly used in relation to workplace air measurements and exposure assessments are defined within individual standards or technical documents and are often defined differently from one standard or document to the next. This creates ambiguities and inconsistencies in the use of such terms. This International Standard was developed to ensure that commonly used terms have agreed-upon definitions and to eliminate ambiguities and inconsistencies in their usage. It will be of benefit to agencies concerned with health and safety at work, industrial hygienists and other public health professionals, analytical laboratories, industrial users of metals and metalloids and their workers.



# Workplace air — Terminology

## 1 Scope

This International Standard specifies terms and definitions that are related to the assessment of workplace exposure (see 2.1.5.1) to chemical and biological agents (see 2.1.1.1). These are either general terms or are specific to physical and chemical processes of air sampling, the analytical method (see 2.3.3), or method performance.

The terms included are those that have been identified as being fundamental because their definition is necessary to avoid ambiguity and ensure consistency of use.

This International Standard is applicable to all International Standards, ISO Technical Reports, ISO Technical Specifications, and ISO Guides related to workplace atmospheres.

## 2 Terms and definitions

### 2.1 General terms

#### 2.1.1 Agents

##### 2.1.1.1

##### **biological agent**

one of a number of agents such as bacteria, viruses, fungi and other micro-organisms or parts of them and their associated toxins, including those which have been genetically modified, cell cultures or endoparasites which are potentially hazardous to human health

Note 1 to entry: Dusts of organic origin, for example, cotton dust, flour dust and wood dust, are not considered to be biological agents and are therefore not covered by this definition.

[SOURCE: EN 1540:2011, 2.1.1, modified — Added “one of a number of agents such as” to definition and changed “pollen” to “cotton dust”.]

##### 2.1.1.2

##### **chemical agent**

chemical element or compound on its own or admixed as it occurs in the natural state or as produced, used, or released, including release as waste, by any work activity, whether or not produced intentionally and whether or not placed on the market

[SOURCE: Council Directive 98/24/EC, Art. 2 a]

#### 2.1.2 Air pollutants

##### 2.1.2.1

##### **air pollutant**

material emitted into the atmosphere either by human activity or natural processes and adversely affecting humans or the environment

[SOURCE: EN 1540:2011, 2.2.1, modified — Changed “man” to “humans”.]

##### 2.1.2.2

##### **airborne dust**

finely divided matter, in solid form, dispersed in air

[SOURCE: EN 1540:2011, 2.2.2]