INTERNATIONAL STANDARD

ISO 4225

Third edition
2020-05

Air quality — General aspects — Vocabulary

Qualité de l'air — Aspects généraux — Vocabulaire

This document is a preview generated by EVS

Reference number
ISO 4225:2020(E)

© ISO 2020

This document is a preview generated by EVS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

 © ISO 2020 – All rights reserved

Contents

Page

Foreword ..... **iv**
Introduction ..... **v**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
3.1 General terms 1
3.1.1 Terms describing air quality 1
3.1.2 Agents 2
3.1.3 Terms related to aerosols 2
3.1.4 Terms related to exposure 3
3.1.5 Other terms 3
3.2 Terms related to air pollution and pollution control 5
3.2.1 Terms generally describing air pollution 5
3.2.2 Components or forms of air pollution 7
3.2.3 Terms related to control of air pollution 9
3.3 Terms related to air quality sampling 10
3.3.1 Samples 10
3.3.2 Sampling equipment 10
3.3.3 Sampling methods 12
3.4 Terms related to air quality measurement 13
3.4.1 Measurement methods 13
Annex A (informative) **Alphabetical index of terms defined** **15**
Bibliography **19**

This document is a preview generated by EVS

© ISO 2020 – All rights reserved

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).

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).

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

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 146, *Air quality*, Subcommittee SC 4, *General aspects*.

This third edition cancels and replaces the second edition (ISO 4225:1994), which has been technically revised. The main changes compared to the previous edition are as follows:

— where appropriate, terms and definitions have been harmonized with ISO 18158:2016;

— obsolete terms have been removed;

— references have been updated.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This document is a preview generated by EVS

 © ISO 2020 – All rights reserved

Introduction

The work programme of ISO/TC 146, Air quality, includes the standardization of procedures for sampling and measurement of gases, vapours and airborne particles. Many terms that are commonly used in relation to air quality, sampling and measurement 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 document 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 air quality, sampling, and laboratory analysis.

The terms given in this document are those in common use. The list should not be considered complete, however, and further terms will be added as the need arises.

This document is a preview generated by EVS

© ISO 2020 – All rights reserved

This document is a preview generated by EVS

Air quality — General aspects — Vocabulary

1 Scope

This document specifies terms and definitions that are related to *air quality* (see 3.1.1.1). These are either general terms or are used in connection with the *sampling* (see 3.3.3.1) and measurement of gases, *vapours* (see 3.1.5.8) and *airborne particles* (see 3.2.2.1) for the determination of air quality.

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.

An alphabetical index of the terms is provided in Annex A.

This document is applicable to all International Standards, ISO Technical Reports, ISO Technical Specifications, and ISO Guides related to air quality.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1 General terms

3.1.1 Terms describing air quality

3.1.1.1
air quality
features of the air which have an impact on humans (e.g., safety and health) and/or the environment

Note 1 to entry: Air quality is typically expressed in terms of the presence or absence of *air pollution* (3.2.1.2) (e.g. *emissions* (3.2.1.4) or conversions resulting from emissions, e.g., ozone), using one or more measurements.

Note 2 to entry: The concept of air quality can be used in reference to *ambient air* (3.1.1.3), *indoor air* (3.1.1.5), or *workplace air* (3.1.1.7).

3.1.1.2
air quality standard
specified attribute of the air intended to prevent or minimize impacts on humans (e.g. safety and health) and/or the environment

Note 1 to entry: Air quality standards are frequently defined statistically by setting a limit to the concentration of an *air pollutant* (3.2.1.1) over a specified *averaging time* (3.1.1.9).

Note 2 to entry: Air quality standards can have legal or advisory status in one or more jurisdictions.

This document is a preview generated by EVS

© ISO 2020 – All rights reserved