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## **Nanotechnologies — Plain language explanation of selected terms from the ISO/IEC 80004 series**

*Nanotechnologies — Explication en langage simple des termes choisis  
de la série de normes ISO/IEC 80004*



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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)).

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For an explanation on 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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## Introduction

The increasing use of nanomaterials in industry and society means that their utility, risks and benefits throughout their life-cycle are important topics for discussion.

This document offers explanations (including examples) of selected nanotechnology terms and is intended to facilitate an understanding of the use and applications of nanotechnology. Its target audience is those who need to make decisions about the use of nanotechnology. The specific aim is to:

- a) promote consistent usage and reduce misinterpretation of terms among users; and
- b) facilitate communication and understanding in developing or commercializing applications of nanotechnologies.

This document contains selected key terms and provides definitions and explanations to aid understanding and illustrate, where applicable, the relationship between one term and another, using practical examples where possible.

For ease of reference the ISO definitions are repeated throughout the document as appropriate.

Explanations and examples are chosen to underpin the selected terms published in the ISO/IEC 80004 vocabulary series.

Where new understanding develops, then the tools used to communicate such knowledge will benefit from the constant review and revision of key terms as necessary. New terms can find common usage which are not yet in the ISO/IEC 80004 vocabulary series. Such terms can be synonymous with terms and definitions already found in existing ISO documents.