
Quantities and units —

Part 9:

**Physical chemistry and molecular
physics**

AMENDMENT 1

Grandeurs et unités —

Partie 9: Chimie physique et physique moléculaire

AMENDEMENT 1

STANDARDSISO.COM: Click to view the PDF of ISO 80000-9:2009/Amd1:2011

STANDARDSISO.COM: Click to view the full PDF of ISO 80000-9:2009/Amd1:2011
Withdrawn



COPYRIGHT PROTECTED DOCUMENT

© ISO 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

Amendment 1 to ISO 80000-9:2009 was prepared by Technical Committee ISO/TC 12, *Quantities and units*, in collaboration with IEC/TC 25, *Quantities and units*.

STANDARDSISO.COM: Click to view the full PDF of ISO 80000-9:2009/AMD1:2017

Withdrawn

Quantities and units —

Part 9: Physical chemistry and molecular physics

AMENDMENT 1

Page iv, Foreword

Add at the end of the 5th paragraph:

in collaboration with IEC/TC 25, *Quantities and units*.

Page v, Introduction, 0.3.1

At the end of the first paragraph, delete the reference to Footnote 1) and the footnote.

Page 4, 9-4, Remarks column

Change the second line to read:

10^{23} mol^{-1}

Page 33, Note 1

Change "ISO 80000-10: — item 10-92a" to "ISO 80000-10:2009, item 10-92.a".

Page 34, Annex B

Replace the existing Annex B with the one given on the following page.

Page 37, Bibliography

Replace References [1] and [2] by the following:

[1] ISO 80000-1:2009, *Quantities and units — Part 1: General*

[2] ISO 80000-10:2009, *Quantities and units — Part 10: Atomic and nuclear physics*

Delete the references to Footnotes 1) and 2) and the footnotes.

Annex B (normative)

Symbols for chemical elements and nuclides

Symbols for chemical elements shall be written in roman (upright) font with a capital initial and often followed by one lower case letter. The symbol is not followed by a full stop except at the end of a sentence.

EXAMPLES

H As Th

The attached subscripts and superscripts specifying a nuclide or molecule shall have the following meanings and positions, all physical notations being on the left of the symbol and all chemical notations being on the right.

The nucleon number (mass number) of a nuclide is shown in the left superscript position, as in the following example.

^{14}N

The number of atoms of a nuclide in a molecule is shown in the right subscript position, as in the following example.

$^{14}\text{N}_2$

The atomic number (proton number) is shown in the left subscript position, as in the following example.

$_{64}\text{Gd}$

The state of ionization is shown in the right superscript position, as in the following examples.

Na^+ , PO_4^{3-} , $(\text{PO}_4)^{3-}$

The state of electrical excitation is shown in the right superscript position, as in the following examples.

He^* , NO^*

The state of nuclear excitation is shown with the symbol * in the left superscript position and for a metastable nuclide is indicated by adding the letter m (in roman type) to the mass number of the nuclide, as in the following example.

$^{137*}\text{Xe}$, or when metastable, $^{133\text{m}}\text{Xe}$