

ISBN 978-0-626-34903-5

**SANS 80000-1:2017**

Edition 1 and ISO tech. corr. 1

**ISO 80000-1:2009**

Edition 1 and tech. corr. 1

# SOUTH AFRICAN NATIONAL STANDARD

## Quantities and units

### Part 1: General

This national standard is the identical implementation of ISO 80000-1:2009 and technical corrigendum 1, and is adopted with the permission of International Organization for Standardization.

**WARNING**  
This document references other documents normatively.

This page has been left blank intentionally



## **COPYRIGHT PROTECTED DOCUMENT**

© SABS

In terms of the Standards Act 8 of 2008, the copyright in all South African National Standards or any other publications published by the SABS Standards Division, vests in the SABS. Any use of South African National Standards is limited to use specifically prescribed by the SABS. In the case of a South African National Standard based on an international standard, ownership of the copyright vests in the organization from which the SABS adopted the standard, whether it be under licence or membership agreement. The SABS is obliged to protect such copyright and is authorized to make the relevant international organization aware of any misuse thereof. Unless exemption has been granted, no extract or full text of any South African National Standard may be copied, reproduced, stored in a retrieval system or transmitted in any form or by any means without prior written permission from the SABS Standards Division. This does not preclude the free use, in the course of implementing the standard, of necessary details such as symbols, and size, type or grade designations. If these details are to be used for any purpose other than implementation, prior written permission must be obtained.

Details, advice and limitations of use can be obtained from the Manager: Standards Sales and Information Services. Tel: +27 (0) 12 428 6883 email: [sales@sabs.co.za](mailto:sales@sabs.co.za)

### **SABS – Standards Division**

The objective of the SABS Standards Division is to develop, promote and maintain South African National Standards. This objective is incorporated in the Standards Act, 2008 (Act No. 8 of 2008).

The SABS continuously strives to improve the quality of its products and services and would therefore be grateful if anyone finding an inaccuracy or ambiguity while using this standard would inform the secretary of the technical committee responsible, the identity of which can be found in the foreword.

### **Buying Standards**

Contact the Sales Office for South African and international standards, which are available in both electronic and hard copy format. Tel: +27 (0) 12 428 6883 email: [sales@sabs.co.za](mailto:sales@sabs.co.za)

South African National Standards are also available online from the SABS Webstore [www.store.sabs.co.za](http://www.store.sabs.co.za)

### **Information on Standards**

SABS Customer Services provide comprehensive standards-related information on national, regional and international standards. Tel: +27 (0) 12 428 7911 / 0861 27 7227 email: [info@sabs.co.za](mailto:info@sabs.co.za)

**SANS 80000-1:2017**

Edition 1 and ISO tech. corr. 1

**ISO 80000-1:2009**

Edition 1 and tech. corr. 1

**Table of changes**

<b>Change No.</b>	<b>Date</b>	<b>Scope</b>
ISO tech. corr. 1	2011	Amended to update the subclause on chemical elements and nuclides.

**National foreword**

This South African standard was prepared by National Committee SABS/TC 070, *Legal metrology*, in accordance with procedures of the South African Bureau of Standards, in compliance with annex 3 of the WTO/TBT agreement.

This document was approved for publication in October 2017.

**Compliance with this document cannot confer immunity from legal obligations.**

In South Africa the prefixes "hecto-", "deca-", "deci-" and "centi-", as indicated in table 4 of ISO 80000-1, do not represent steps of 1 000 and their general usage is, therefore, discouraged except in specialized fields. For example, the centimetre (cm) unit is used in the clothing and textile industries and therefore also for the measurements of the human body. It should preferably not be used elsewhere. It is sometimes felt necessary to use the prefixes "centi-" and "deci-" for SI units that are raised to the second or higher powers (for example, area (m<sup>2</sup>), volume (m<sup>3</sup>)) in order to avoid large steps that might be considered impractical. However, when such prefixes are used, additional factors of 10 or 100 are necessary to bring the data into a suitable form for calculation, which negates the simplicity of the SI system of units.

In South Africa the decimal comma is the only recognized decimal indicator for all numbers, including amounts of money. In addition, large numbers (except the year and ordinal numbers used as reference numbers) are divided into groups of three, separated by spaces.

