



BSI Standards Publication

**Health informatics – Identification of medicinal products – Implementation guidelines for ISO 11616 data elements and structures for the unique identification and exchange of regulated pharmaceutical product information (ISO/TS 20451:2017)**

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## National foreword

This Published Document is the UK implementation of CEN ISO/TS 20451:2018. It is identical to ISO/TS 20451:2017.

The UK participation in its preparation was entrusted to Technical Committee IST/35, Health informatics.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

**Health informatics - Identification of medicinal products -  
 Implementation guidelines for ISO 11616 data elements  
 and structures for the unique identification and exchange  
 of regulated pharmaceutical product information (ISO/TS  
 20451:2017)**

Informatique de santé - Identification des médicaments  
 - Lignes directrices pour l'implémentation des  
 éléments de données et structures ISO 11616 pour  
 l'identification unique et l'échange d'informations  
 réglementées sur les produits pharmaceutiques  
 (ISO/TS 20451:2017)

Medizinische Informatik - Identifikation von  
 Arzneimitteln - Implementierungsleitfaden für ISO  
 11616 Daten-Elemente und -strukturen zur eindeutigen  
 Identifikation und zum Austausch von Informationen  
 über pharmazeutische Produkte (ISO/TS 20451:2017)

This Technical Specification (CEN/TS) was approved by CEN on 13 May 2018 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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 EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

## European foreword

This document (CEN ISO/TS 20451:2018) has been prepared by Technical Committee ISO/TC 215 "Health informatics" in collaboration with Technical Committee CEN/TC 251 "Health informatics" the secretariat of which is held by NEN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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## Endorsement notice

The text of ISO/TS 20451:2017 has been approved by CEN as CEN ISO/TS 20451:2018 without any modification.

# Contents

Page

<b>Foreword</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>2</b>
<b>4 Conformance</b> .....	<b>2</b>
<b>5 Concepts required for the unique identification of pharmaceutical products</b> .....	<b>2</b>
5.1 General considerations for elements required for the unique identification of pharmaceutical products.....	2
5.2 Principles required for the unique identification of a pharmaceutical product.....	2
<b>6 Identifying characteristics for the identification of pharmaceutical products</b> .....	<b>3</b>
6.1 Pharmaceutical product identification strata and levels.....	3
6.2 PhPID specified substance.....	4
6.3 Pharmaceutical product specified substance identification (PhPID SpSub).....	5
6.4 Cardinality.....	5
6.5 Representation of strength concentration.....	6
6.6 Pharmaceutical product identifier (PhPID).....	6
6.7 PhPID algorithm and product code concept.....	7
<b>7 Ingredient, substance and strength</b> .....	<b>8</b>
7.1 General considerations.....	8
7.2 Ingredient.....	9
7.2.1 Ingredient role.....	9
7.2.2 Substance.....	10
7.2.3 Specified substance.....	10
7.2.4 Specified substance group.....	10
7.2.5 Confidentiality indicator.....	11
7.2.6 Strength.....	11
7.2.7 Pharmaceutical product code concept for representing the normalised strength for liquid preparations.....	11
7.2.8 Strength (presentation).....	12
7.2.9 Strength (concentration).....	12
7.2.10 Measurement point.....	13
7.2.11 Country.....	13
7.2.12 Reference strength.....	13
7.2.13 Reference substance.....	13
7.2.14 Reference specified substance.....	13
7.2.15 Reference strength.....	13
7.2.16 Reference strength measurement point.....	14
7.2.17 Reference strength country.....	14
<b>8 Pharmaceutical product: adjuvants and devices</b> .....	<b>14</b>
8.1 General considerations.....	14
8.1.1 Detailed description of pharmaceutical product and device information.....	14
8.1.2 Pharmaceutical product.....	15
8.1.3 Pharmaceutical product characteristics.....	17
8.1.4 Device (pharmaceutical product).....	18
<b>Annex A (normative) Messaging: Ingredient, substance and strength</b> .....	<b>19</b>
<b>Annex B (normative) Messaging: Pharmaceutical product and device</b> .....	<b>33</b>
<b>Annex C (informative) Examples</b> .....	<b>40</b>
<b>Annex D (informative) Examples of representation of strength</b> .....	<b>45</b>

**Bibliography** .....48

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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)).

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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 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).

This document was prepared by Technical Committee ISO/TC 215, *Health informatics*.

## Introduction

This document gives guidelines for implementing ISO 11616, one of the five ISO IDMP standards. The five ISO Standards and four ISO Technical Specifications, when used together, provide the basis for exchanging data elements that will support the unique and unambiguous identification of Medicinal Products. The primary purpose of this document is to provide technical guidance to software implementers; short descriptions of business rationale are also included, where relevant, to provide context. Thus, this document focuses on business and technical considerations for implementation that will construct and parse well-formed, transmittable IDMP messages. Following transmission of required data elements, unique identifiers are to be produced in conformance with the standards to support applications where it is necessary to reliably identify and trace regulated biopharmaceutical products. However, this document does not include extensive information on creation or maintenance of identifier repositories. Reference is made to regional guidance/implementation guides to support practical implementation within a given region/jurisdiction. The development of an ISO technical report for identifying core principles for the maintenance of identifiers and terms for ISO IDMP is to be developed and referenced for applicable ISO IDMP standards and corresponding technical specifications.

# Health informatics — Identification of medicinal products — Implementation guidelines for ISO 11616 data elements and structures for the unique identification and exchange of regulated pharmaceutical product information

## 1 Scope

This document defines the concepts required to associate pharmaceutical products with an appropriate set of PhPID(s) in accordance with ISO 11616.

Pharmaceutical identifiers and elements are to represent pharmaceutical products as represented in a Medicinal Product as indicated by a Medicines Regulatory Authority. The suite of ISO IDMP standards can be applied to off-label usage of Medicinal Products, but is currently outside of the scope of this document.

Reference to ISO 11238, ISO 11239, ISO 11240 and ISO 11615 and HL7 messaging standards, HL7 Reference Information Model (RIM), HL7 V3 Common Product Model (CPM) and HL7 V3 Structured Product Labelling (SPL) can be applied for pharmaceutical product information in the context of this document.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country codes*

ISO 11238, *Health informatics — Identification of Medicinal Products — Data elements and structures for the unique identification and exchange of regulated information on substances*

ISO 11239, *Health informatics — Identification of Medicinal Products — Data elements and structures for the unique identification and exchange of regulated information on pharmaceutical dose forms, units of presentation, routes of administration and packaging*

ISO 11240, *Health informatics — Identification of Medicinal Products — Data elements and structures for the unique identification and exchange of units of measurement*

ISO 11615, *Health informatics — Identification of Medicinal Products — Data elements and structures for the unique identification and exchange of regulated Medicinal Product information*

ISO/TS 19844, *Health informatics — Identification of Medicinal Products — Implementation guidelines for data elements and structures for the unique identification and exchange of regulated information on substances*

ISO/TS 20440, *Health informatics — Identification of Medicinal Products — Implementation guide for ISO 11239 data elements and structures for the unique identification and exchange of regulated information on pharmaceutical dose forms, units of presentation, routes of administration and packaging*

ISO/TS 20443, *Health informatics — Identification of Medicinal Products — Implementation guidelines for ISO 11615 data elements and structures for the unique identification and exchange of regulated Medicinal Product information*