



**ISO 28219**

**Packaging — Labelling and direct product marking with linear bar code and two-dimensional symbols**

*Emballages — Étiquetage et marquage direct sur le produit avec un code à barres linéaire et des symboles bidimensionnels*

**Third edition  
2026-05**



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2026

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  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of ISO 28219:2026. [Click here to purchase the full version from the ANSI store.](#)

<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</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 Requirements</b> .....	<b>3</b>
4.1 Identification.....	3
4.1.1 General.....	3
4.1.2 Unique item identification.....	4
4.1.3 Lot or batch identification.....	4
4.2 Data format common requirements.....	4
4.2.1 General.....	4
4.2.2 General format.....	4
4.2.3 Mandatory data fields.....	6
4.2.4 Syntax.....	12
4.3 General layout and location.....	13
4.3.1 Layout.....	13
4.3.2 Location.....	14
4.3.3 Linear bar code titles.....	14
4.3.4 Human-readable interpretation.....	14
4.4 Symbol requirements.....	14
4.4.1 Symbology recommendations.....	14
4.4.2 Linear bar code symbol requirements.....	15
4.4.3 Two-dimensional symbol requirements.....	16
4.4.4 Protective packaging.....	20
<b>Annex A (informative) Label adhesive characteristics and mark durability</b> .....	<b>21</b>
<b>Annex B (informative) Partial list of commonly used identifiers</b> .....	<b>28</b>
<b>Annex C (informative) Subset of ISO/IEC 646 IRV (table of hexadecimal and decimal values)</b> .....	<b>30</b>
<b>Annex D (informative) User guidance for implementation of the ISO/IEC 15434 data syntax</b> .....	<b>34</b>
<b>Annex E (informative) Registering of issuing agency codes (IACs) for ISO/IEC 15459</b> .....	<b>35</b>
<b>Bibliography</b> .....	<b>36</b>

This is a preview of ISO 28219:2026. [Click here to purchase the full version from the ANSI store.](#)

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 document 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)).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at [www.iso.org/patents](http://www.iso.org/patents). ISO shall not be held responsible for identifying any or all such patent rights.

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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 122, *Packaging*.

This third edition cancels and replaces the second edition (ISO 28219:2017), which has been technically revised.

The main changes are as follows:

- added URL formats (ISO/IEC 18975, IEC 61406-x);
- preference on formats with concatenated fields;
- preference on 2D symbologies, stacked symbologies removed.

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](http://www.iso.org/members.html).

This is a preview of ISO 28219:2026. [Click here to purchase the full version from the ANSI store.](#)

Today, global industries widely use machine-readable markings on products for inventory control, quality control, and product life cycle management. Common technologies, data structures, conformance, and applications standards are necessary to enable all trading partners to use such markings internally and throughout the supply chain.

A number of different product labelling and marking standards exist, each designed to meet the requirements of the specific industry sector. For effective and economic use within and between industry sectors, one common multi-industry standard is a necessity.

A standard linear bar code or two-dimensional symbol marked on a product or part will facilitate the automation of inventory control, quality control, and product life cycle management. The linear bar code or two-dimensional symbol information on the product can be used as a key to access the appropriate database that contains detailed information about the product, including information transmitted via electronic data interchange (EDI). In addition, a product mark can contain other information as agreed between the trading partners.

This document does not supersede or replace any applicable safety or regulatory marking or labelling requirements. This document is meant to satisfy the minimum product marking requirements of numerous applications and industry groups. As such, its applicability is to a wide range of industries, each of which can have specific implementation guidelines for this document. This document is intended to be applied in addition to any other mandated labelling requirements.