INTERNATIONAL STANDARD

ISO 22982-1

First edition
2021-03

Transport packaging — Temperature-controlled transport packages for parcel shipping —

Part 1: General requirements

This document is a preview generated by EVS

Reference number
ISO 22982-1:2021(E)

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Published in Switzerland

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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).

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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 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.

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

A list of all parts in the ISO 22982 series can be found on the ISO website.

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.

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Introduction

This document is developed in reflection of the situation where producers and users experience confusion regarding the test procedures of temperature-controlled transport packages for parcel shipping. Despite the increasing international attention to product safety and quality of cold chain parcel shipping through e-commerce, an International Standard that addresses the variations in the use of proper package testing has been missing. This document should be directly applicable to less developed countries as well as developed countries in terms of cold chain system or temperature-controlled supply chain.

The purpose of this document is to specify the general requirements of temperature-controlled packaging systems for transport packaging during parcel shipping. The packages are delivered under temperature-controlled supply chain on the purpose of controlling products' qualities, safety and services.

In certain circumstances, however, agreements can be made among stakeholders under the conditions, including but not limited to the following:

a) when products weigh heavily;

b) when dry ice or possible hazardous materials are present inside the package; or

c) when there is any specific temperature requirement.

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1 Scope

This document specifies the general requirements of transport packaging, especially the containers, which are formed or prepared for the temperature-controlled transport services of parcel shipping. Safety or sanitation is not covered in this document.

This document set outs the general requirements for transport packaging for safe storage and distribution of temperature-sensitive products.

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 4898, *Rigid cellular plastics — Thermal insulation products for buildings — Specifications*

ISO 9229, *Thermal insulation — Vocabulary*

ISO 18616-1, *Transport packaging — Reusable, rigid plastic distribution boxes — Part 1: General purpose application*

ISO 21067-1, *Packaging — Vocabulary — Part 1: General terms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 21067-1, ISO 9229 and ISO 18616-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
temperature-controlled packaging
packaging/container that is designed or prepared for the purpose of maintaining specific temperature ranges

3.2
temperature-controlled packaging system
packaging system including all the means used to ensure a constant temperature within the desired temperature range for a product that is unstable in the outside temperature from manufacture to use

3.3
active packaging system
packaging system able to control the desired temperature by supplying power such as batteries, fuel, etc.

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