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Packaging - Complete, filled transport packages - General rules for the compilation of performance test schedules (ISO 4180:2019)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/20

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English Version

Packaging - Complete, filled transport packages - General
rules for the compilation of performance test schedules
(ISO 4180:2019)

Emballages - Emballages d'expédition complets et
pleins - Règles générales pour l'établissement de
programmes d'essais de performance (ISO 4180:2019)

Verpackung - Versandfertige Packstücke - Allgemeine
Regeln für die Erstellung von Prüfplänen (ISO
4180:2019)

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European foreword

This document (EN ISO 4180:2019) has been prepared by Technical Committee ISO/TC 122 "Packaging" in collaboration with Technical Committee CEN/TC 261 "Packaging" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2020, and conflicting national standards shall be withdrawn at the latest by May 2020.

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Endorsement notice

The text of ISO 4180:2019 has been approved by CEN as EN ISO 4180:2019 without any modification.

**INTERNATIONAL
STANDARD****ISO
4180**Second edition
2019-11

**Packaging — Complete, filled
transport packages — General rules
for the compilation of performance
test schedules**

*Emballages — Emballages d'expédition complets et pleins —
Règles générales pour l'établissement de programmes d'essais de
performance*

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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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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*, Subcommittee SC 3, *Performance requirements and tests for means of packaging, packages and unit loads (as required by ISO/TC 122)*.

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.

This second edition cancels and replaces the first edition (ISO 4180:2009) which has been technically revised. The main changes compared to the previous edition are as follows:

- the test item in the test schedule can now be selected by agreement of the stakeholders depending on the expected or existing transportation process and hazards;
- in [6.4](#), the test conditions have been reviewed and revised by the distance and condition of transportation;
- in [6.5](#), a new Level-4 has been added for well controlled handling;
- in [6.6](#), the test conditions have been reviewed and revised; they can be changed or selected depending on the storage conditions by the agreement of stakeholders.

Packaging — Complete, filled transport packages — General rules for the compilation of performance test schedules

1 Scope

This document establishes general rules for the compilation of performance test schedules for complete, filled transport packages intended for use within any distribution system except for the packages used for dangerous goods.

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 2206, *Packaging — Complete, filled transport packages — Identification of parts when testing*

ISO 2233, *Packaging — Complete, filled transport packages and unit loads — Conditioning for testing*

ISO 2244, *Packaging — Complete, filled transport packages and unit loads — Horizontal impact tests*

ISO 2873, *Packaging — Complete, filled transport packages and unit loads — Low pressure test*

ISO 8318, *Packaging — Complete, filled transport packages and unit loads — Sinusoidal vibration tests using a variable frequency*

ISO 13355:2016, *Packaging — Complete, filled transport packages and unit loads — Vertical random vibration test*

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

IEC 60068-1:2013, *Environmental testing — Part 1: General and guidance*

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