INTERNATIONAL STANDARD

ISO 21067-1

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Packaging — Vocabulary —

Part 1: General terms

Emballages — Vocabulaire —

Partie 1: Termes généraux

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Foreword

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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 on 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.

The committee responsible for this document is ISO/TC 122, *Packaging.*

This first edition of ISO 21067-1, together with ISO 21067-2, cancels and replaces ISO 21067:2007, which has been technically revised and bifurcated into two sections.

ISO 21067 consists of the following parts, under the general title *Packaging — Vocabulary*:

— *Part 1: General terms*

— *Part 2: Packaging and the environment terms*

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Introduction

This part of ISO 21067 was compiled from various sources, including the following:

— American National Standards Institute (ANSI);

— ASTM International (ASTM D 996);

— Australian Standards (AS 2400);

— British Standards Institution (BS 3130-1);

— Deutsches Institut für Normung (DIN 55405);

— European Packaging Federation (EPF);

— South African Bureau of Standards (SABS);

— NATO STANAG 4279 (AAP-23);

— UN/ECE Recommendation No. 21.

This part of ISO 21067 is intended to be used as a source document within the global community. This inventory of terms will be useful in a multilingual thesaurus showing concept relationships as well as terms in other languages. Work on this proposed standard began in 1987 and has been under the convenorship of ANSI since 1995 as ISO/TC 122.

This part of ISO 21067 does not cover environmental statements referring to packaging, which are covered by ISO 14021.

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Packaging — Vocabulary —

Part 1: General terms

1 Scope

This part of ISO 21067 specifies preferred terms and definitions related to packaging and materials handling, for use in international commerce, except for dangerous goods packaging where terms and definitions are given in the United Nations Recommendations on the Transport of Dangerous Goods [39].

This part of ISO 21067 is augmented by the following packaging-specific standards:

— ISO 6590-1;

— ISO 6590-2;

— ISO 15867.

2 Terms and definitions

2.1 Basic terms

2.1.1
packaging
<product> product to be used for the containment, protection, handling, delivery, storage, transport and presentation of goods, from raw materials to processed goods, from the producer to the user or consumer, including processor, assembler or other intermediary

2.1.2
packaging
<operation> operations involved in the preparation of goods for containment, protection, handling, delivery, storage, transport and presentation of goods, from raw materials to processed goods, from the producer to the user or consumer

Note 1 to entry: The term includes preservation, packing, marking and unitization.

2.1.3
pack, noun
package, noun
product package
packaging (2.1.1) and its contents

2.1.4
pack, verb
package, verb
create a *package* (2.1.3)

2.1.5
article
item or commodity

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2.2 General terms

2.2.1
container
<for packaging> *box* (2.3.8) or receptacle which holds, restrains, or encloses any *article*(s) (2.1.5) to be stored or transported

2.2.2
shipping container
<for transport> *article* (2.1.5) of transport equipment strong enough to be suitable for repeated use and specially designed to facilitate the carriage of goods by one or more means of transport without breakage of load

Note 1 to entry: Adapted from RID/ADR regulations.[37][38]

Note 2 to entry: The phrase "without breakage of load" means that the container is handled as a single unit during transit.

Note 3 to entry: The term "container" is often used as a non-specific term for a receptacle (see 2.2.1).

Note 4 to entry: For full definition of freight container, see ISO 830.

2.2.3
primary packaging
packaging (2.1.1) designed to come into direct contact with the product

2.2.4
secondary packaging
packaging (2.1.1) designed to contain one or more *primary packagings* (2.2.3) together with any protective materials where required

2.2.5
inner packaging
packaging (2.1.1) for which an outer packaging is required for transport

[SOURCE: ISO 16883:2007, 3.4]

2.2.6
distribution packaging
transport packaging
tertiary packaging
packaging (2.1.1) designed to contain one or more *articles* (2.1.5) or *packages* (2.1.3), or bulk material, for the purposes of transport, handling and/or distribution

2.2.7
consumer packaging
retail packaging
sales packaging
packaging (2.1.1) constituting, with its contents, a sales unit for the final user or consumer at the point of retail

2.2.8
industrial packaging
packaging (2.1.1) for raw materials, *components* (2.2.22) and partially manufactured or finished goods, for distribution from manufacturer to manufacturer and/or other intermediaries such as processor or assembler

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2.2.9
commercial packaging
methods and materials used by a supplier to satisfy the requirements of the distribution system

Note 1 to entry: Commercial packaging includes industrial packaging and consumer packaging and may be applicable for certain levels of military packaging.

2.2.10
bulk packaging
packaging (2.1.1) intended to contain loose *articles* (2.1.5), large masses of solids or granular materials, or liquids for transport or storage

2.2.11
child-resistant packaging
package (2.1.3) consisting of a *container* (2.2.1) and appropriate *closure* (2.5.1) which is difficult for young children under the age of 52 months to open (or gain access to the contents), but which is not difficult for adults to use properly

[SOURCE: ISO 8317:2015, 2.3]

2.2.12
reclosable package
package (2.1.3) which, after it has been initially opened, is capable of being reclosed with a similar degree of security and is capable of being used a sufficient number of times to dispense the total contents without loss of security

[SOURCE: ISO 8317:2015, 2.4]

2.2.13
base pack
unit pack
smallest *package* (2.1.3) with identical or different products that are to be supplied at the same time

2.2.14
commercial package
packaging (2.1.1) which, as far as quantity of content, type, quality or design of the *package* (2.1.3) are concerned, conforms to the requirements of the respective level of trading

2.2.15
consolidated pack
more than one *package* (2.1.3) grouped together to facilitate handling operations

2.2.16
containerization
shipping method in which goods are loaded together in one *container* (2.2.1)

2.2.17
overpack
over packaging
enclosure generally used by a single consignor to contain one or more *packages* (2.1.3) consolidated into a single unit to facilitate easy handling and stowage during transport

Note 1 to entry: Adapted from United Nations Recommendations on the Transport of Dangerous Goods.[39]

Note 2 to entry: In English, the same term is also used to describe the use of excessive packaging.

2.2.18
packaging chain
sector of the overall economy involving all economic operators concerned with the packaging and/or distribution of goods

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2.2.19
flexible packaging
packaging whose shape is likely to change after the contents are added or removed

2.2.20
rigid packaging
packaging whose shape remains essentially unchanged after the contents are added or removed

2.2.21
packaging component
part of packaging that can be separated by hand or by using simple physical means

[SOURCE: ISO 18601:2013, 3.11]

Note 1 to entry: Compare *component packaging* (2.2.23).

2.2.22
component
part, assembly or raw material that is a constituent of a higher-level assembly

[SOURCE: ISO 22742:2010, 3.3]

2.2.23
component packaging
commercial unit of *components* (2.2.22) defined by the supplier, including, if applicable, their means for protection, structured alignment, or automated assembly

Note 1 to entry: Component packaging can include: leaded components taped on reels or in ammo boxes according to IEC 60286–1 and IEC 60286–2; surface mount devices (surface mount components), taped on reels according to IEC 60286–3 and in bulk case IEC 60286–6; integrated circuits (ICs) in stick magazines according to IEC 60286–4; or in matrix trays according to IEC 60286–5. Compare *product package* (2.1.3).

[SOURCE: ISO 22742:2010, 3.4]

2.2.24
packaging constituent
part from which *packaging* (2.1.1) or its *components* (2.2.22) are made and which cannot be separated by hand or by using simple physical means

[SOURCE: ISO 18601:2013, 3.12]

2.3 Types of packaging

2.3.1
bag
flexible packaging (2.2.19) of single or multiple layers or plies, generally enclosed on all sides except one, forming an opening that may or may not be sealed after filling

2.3.2
sack
bag (2.3.1)

Note 1 to entry: "Bag" is also defined in other International Standards as "sack".

2.3.3
bale
shaped unit of compressed articles or materials bound with cord, *strapping* (2.5.5) or metal ties under tension

Note 1 to entry: It may also be wrapped.

Note 2 to entry: Adapted from NATO glossary of packaging terms and definitions.[36]

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2.3.4
barrel
cask
keg
packaging of circular cross-section, with greater length than breadth, with convex sides and two ends of equal diameter

Note 1 to entry: A barrel is normally made of wooden staves bound together with hoops.

2.3.5
bottle
rigid packaging (2.2.21), typically of glass or plastic, having a comparatively narrow neck or mouth, with a *closure* (2.5.1) and usually no handle

2.3.6
jar
rigid packaging (2.2.21) of glass, plastic or earthenware with a wide mouth

2.3.7
ampoule
small packaging usually made of glass or plastic capable of being hermetically sealed

2.3.8
box
rigid packaging (2.2.21) with rectangular or polygonal sides, usually completely enclosing the contents

Note 1 to entry: The sides may contain apertures for handling or ventilation.

2.3.9
carton
folding collapsible packaging generally made from boxboard

Note 1 to entry: Although this term is in general use in English, it might not have an equivalent term in other languages.

2.3.10
case
non-specific term for *transport packaging* (2.2.6), often used to refer to a box

2.3.11
crate
transport packaging (2.2.1) with incomplete surfaces

2.3.12
wirebound box
box whose parts are reinforced and connected to each other by means of tempered wires

Note 1 to entry: This type of box is usually closed for shipment by twisting of the wire ends or by connecting prefabricated loops.

2.3.13
bundle
number of articles bound with materials under tension, which also may be wrapped

2.3.14
can
small *primary packaging* (2.2.3), usually cylindrical and usually made of metal

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2.3.15
drum
cylindrical packaging whose bottom end is permanently fixed to the *body* (2.5.2) and top end (head) is either removable or non-removable

Note 1 to entry: Barrels are not classified as drums.

2.3.16
non-removable head drum
tight head drum
cylindrical packaging whose ends are permanently fixed to the *body* (2.5.2), with one or more openings for filling, emptying and venting in the top end (head) and which may also include body openings for the same purposes

[SOURCE: ISO 20848-2:2006, 3.1, modified]

2.3.17
removable head drum
open head drum
drum (2.3.15) whose bottom end is permanently fixed to the *body* (2.5.2) and whose top end can be removed as a lid (head)

Note 1 to entry: The top and body may have additional openings.

[SOURCE: ISO 20848-1:2006, 3.1, modified]

2.3.18
pail
nesting drum
packaging of circular cross-section, tapered or cylindrical, and may be equipped with a lid and usually a handle

2.3.19
jerrican
metal or plastics primary packaging of rectangular or polygonal cross-section for products

Note 1 to entry: An aperture on the top or side of the body and a carrying device is usual.

2.3.20
tube
cylindrical packaging whose ends may be a different material to the *body* (2.5.2)

2.3.21
collapsible tube
flexible packaging (2.2.19) having a nozzle and cap at one end and closed at the other, serving as both *container* (2.2.1) and dispenser

2.3.22
tray
stiff layer material for dividing and holding multi packages

2.4 Packaging materials

NOTE Further terms used in relation to materials used in packaging are given in Annex A.

2.4.1
absorbent packaging material
material included within a *package* (2.1.3) to soak up liquids resulting from leakage, seepage or liquefaction of the contents

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2.4.2
barrier material
material that retards or prevents transmission or permeation of gases or passage of solids, liquids, gases or radiated energy

2.4.3
UV light barrier
treatment/exposure of the packaging with the aim to prevent diffusion of UV light into the packaging

2.4.4
cushioning material
material used to isolate or reduce the effect of externally applied shock and/or vibration forces

2.4.5
shrink wrap
shrink film
plastics material that shrinks in size when heated to conform to the item(s) packaged

2.4.6
stretch wrap
material that elongates when applied under tension and which, through elastic recovery, conforms to the item(s) packaged

2.5 Auxiliary terms in use with packaging

2.5.1
closure
means of closing packaging to retain its contents

2.5.2
body
<packaging> principal part of a *container* (2.2.1) or packaging, usually the largest part in one piece containing the sides

2.5.3
preservation
application of protective measures, such as cleaning, drying, the use of preservatives and *barrier materials* (2.4.2), to prevent deterioration

2.5.4
staple
stitch
U-shaped round or flat wire fastener, which may or may not be clinched, for closing packaging or holding package components together

2.5.5
strapping
strip of material, generally of flat or circular cross-section, used to secure packaging or *articles* (2.1.5) within a *container* (2.2.1), to hold together a *bundle* (2.3.13) or *bale* (2.3.3), to reinforce a packaging, or to secure packagings or articles to a *pallet* (2.5.7)

2.5.6
tape
strip of flexible material with one or more adhesive faces

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2.5.7
pallet
rigid horizontal platform of minimum height, compatible with handling by pallet trucks, and/or fork-lift trucks and other appropriate handling equipment, used as a base for assembling, stacking, storing, handling, loading, displaying or transporting goods and loads

[SOURCE: ISO 445:2013, 2.1, modified]

Note 1 to entry: Definitions of types of pallet and related terms can be found in ISO 445.

2.5.8
unit load
unitized load
single item or assembly of items designed to enable these to be handled as a single entity

2.5.9
label
piece of paper or other material displaying information and affixed to the packaging or *article* (2.1.5)

Note 1 to entry: This definition does not apply to labels for the transport of dangerous goods.

2.5.10
tag
label (2.5.9) attached to the packaging or *article* (2.1.5) by means of a tie or other suitable means

2.5.11
adhesive
substance capable of holding materials together by surface attachment

2.5.12
fastener
device that serves to secure one part to another

2.5.13
sealing
method of bonding mating surfaces or achieving non-leaking close contact between surfaces

2.5.14
heat sealing
method of bonding mating surfaces under controlled application of heat, pressure and dwell time

2.5.15
pressure sealing
cold sealing
sealing (2.5.13) under controlled application of pressure and dwell time

2.5.16
nest
group of items of packaging that fit one within the other, usually when empty

2.5.17
accessible design
design focused on principles of extending standard design to people with some type of performance limitation to maximize the number of potential customers who can readily use a product, building or service

[SOURCE: ISO 11156:2011, 3.1]

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2.5.18
returnable packaging item
RPI
any material used for the "protection" of goods during handling, delivery, storage and transport that are returned for further usage

Note 1 to entry: Ownership does not change at time of purchase or delivery.

[SOURCE: ISO 17364:2013, 4.10, modified — Note 1 deleted.]

2.5.19
returnable transport item
RTI
any product for the purposes of transport, handling and/or distribution of one or more products or *product packages* (2.1.3) that are returned for further usage

EXAMPLE Pallets with and without cash deposits, as well as all forms of reusable crates, trays, boxes, roll pallets, barrels, and trolleys.

Note 1 to entry: The term "returnable transport item" implies that if the ownership title of the item, e.g. pallet, remains with its owner (shipper) then ISO 17364 is applicable. If the ownership title of the item, e.g. pallet, is transferred to the customer as part of a unitized load, then it is considered an element of that unitized load, and the applicable International Standard is ISO 17365.

Note 2 to entry: Freight containers, trailers and other similar enclosed modules are not covered by the term "returnable transport item".

Note 3 to entry: The term "returnable transport equipment" is considered to have the same definition as the term "returnable transport item" within an electronic data interchange environment.

Note 4 to entry: Ownership does not change at time of purchase or delivery.

[SOURCE: ISO 17364:2013, 4.3, modified]

2.5.20
intermediate bulk container
IBC
primary packaging (2.2.3) designed to

a) have a capacity of 3 m^3 (3 000 litres) or less,

b) be handled mechanically with or without integral or detachable devices,

c) contain liquids, pastes or solids (for instance powders or granules), and

d) be resistant to the stresses imparted during handling and transport as determined by tests

[SOURCE: ISO 15867:2003, 2.1]

Note 1 to entry: This definition is not applicable to IBCs used for the transport of dangerous goods.

Note 2 to entry: Definitions of types of IBCs and related terms can be found in ISO 15867, ISO 16495 and ISO 28198.

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Annex A
(informative)

Further terms used in relation to materials used in packaging

A.1 Paper and board

NOTE Other definitions relating to paper and board can be found in ISO 4046 (all parts).

A.1.1
paper
material in the form of a coherent sheet or web, excluding sheets or laps of pulp as commonly understood for paper-making or paper-dissolving purposes and non-woven products, made by deposition of vegetable, mineral, animal or synthetic fibres, or their mixtures, from a fluid suspension onto a suitable forming device, with or without the addition of other substances

Note 1 to entry: Paper may be coated, impregnated or otherwise converted, during or after its manufacture, without necessarily losing its identity as paper. In conventional paper-making processes, the fluid medium is water; new developments, however, include the use of air and other fluids.

Note 2 to entry: In the generic sense, the term "paper" may be used to describe both paper and board as defined in this part of ISO 21067. The primary distinction between paper and board is normally based upon thickness or grammage, although in some instances the distinction is based on the characteristics and/or end-use. For example, some materials of lower grammage (such as certain grades of folding boxboard and corrugating raw materials) are generally referred to as "board", while other materials of higher grammage (such as certain grades of blotting paper, felt paper and drawing paper) are generally referred to as "paper".

[SOURCE: ISO 4046-3, modified]

A.1.2
board
paperboard
certain types of paper frequently characterized by their relatively high rigidity

Note 1 to entry: See A.1.1, Note 2 to entry.

[SOURCE: ISO 4046-4, modified]

A.1.3
boxboard
folding boxboard
grades of paperboard having good scoring and folding properties, used for fabrication of folding and set-up boxes (cartons)

Note 1 to entry: It is customarily shipped in sheets.

[SOURCE: ISO 4046-4, modified]

A.1.4
containerboard
paperboard components (linerboard, corrugating material and chipboard) used to manufacture corrugated and solid fibreboard

Note 1 to entry: Basis weight is expressed in grams per square metre (or pounds per 1 000 ft^2).

Note 2 to entry: It is customarily shipped in rolls.

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A.1.5
corrugated fibreboard
board consisting of one or more sheets of fluted paper glued to a flat sheet of board or between several sheets

[SOURCE: ISO 4046-4:2016, 4.49, modified]

A.1.6
solid fibreboard
board made from two or more sheets pasted together, often incorporating a lining of kraft or other strong furnish, intended for the manufacture of packing cases and drums

Note 1 to entry: Solid fibreboard generally has a grammage above 600 g/m^2.

A.2 Plastics

A.2.1
plastics
polymeric material which may be formed into flexible film or rigid packaging

A.2.2
biobased plastic
polymeric material wholly or partly of biogenic origin

A.3 Metals

A.3.1
tinplate
cold-rolled low-carbon mild sheet steel or coil, coated on both surfaces with tin that is applied in continuous electrolytic operation

A.3.2
tin mill black plate
untreated low-carbon cold-reduced steel plate, for use only with non-corrosive non-food products in cans with bonded seams

A.3.3
electrolytic chromium/chromium oxide coated steel
ECCS
tin-free steel
cold-rolled low-carbon mild steel sheet or coil, electrolytically treated to produce on both surfaces a duplex film of metallic chromium adjacent to the steel substrate with a top layer of hydrated chromium oxides or hydroxides

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Annex B
(informative)

Numeric and alphabetical index

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