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Packaging — Vocabulary

Emballages — Vocabulaire

Please see the administrative notes on page iii

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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.

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ISO 21067 was prepared by Technical Committee ISO/TC 122, *Packaging*.

Introduction

This vocabulary was compiled from various sources, including the following:

- American National Standards Institute (ANSI)
- American Society for Testing & Materials (ASTM D 996)
- Australian Standards (AS 2400)
- British Standards Institution (BS 3130-1)
- Duetsches Institut fur Normung (DIN 55405-1)
- European Packaging Federation (EPF)
- South African Bureau of Standards (SABS)
- NATO STANAG AAP-23

This International Standard 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, begun in 1987, has been under convenorship of ANSI since 1995 as ISO/TC 122, Working Group 5, *Terminology and vocabulary*.

This International Standard does not cover environmental statements referring to packaging. These are covered by ISO 14021.

Packaging — Vocabulary

1 Scope

This International Standard specifies preferred terms and definitions related to packaging and materials handling, for use in international commerce.

For packaging designed for the transport of dangerous goods, terms and definitions are given in the United Nations Recommendations on the Transport of Dangerous Goods^[9].

2 Terms and definitions

2.1 Basic terms

2.1.1

packaging

⟨product⟩ any 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 The term includes preservation, packing, marking and unitization.

2.1.3

pack, noun

package, noun

packaging (2.1.1) and its contents

2.1.4

pack, verb

package, verb

create a package (2.1.3)

2.2 General terms

2.2.1

container

shipping container

⟨for transport⟩ article 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 Adapted from RID/ADR regulations^{[7] [8]}.

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

NOTE 3 The term “container” is often used as a non-specific term for a receptacle (see 2.2.15).

NOTE 4 In the USA and some other parts of the world, shipping containers are packagings such as boxes, crates and drums that are approved by regulatory agencies for the transport of goods.

NOTE 5 For full definition of freight container, see ISO 830:1999, 3.1.

2.2.2

primary packaging

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

2.2.3

secondary packaging

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

2.2.4

distribution packaging

transport packaging

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

2.2.5

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

2.2.6

industrial packaging

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

2.2.7

bulk packaging

packaging intended to contain loose articles, large masses of solids or granular materials, or liquids for transport or storage

2.2.8

child-resistant package

package which is difficult for young children to open (or gain access to the contents), but which is possible for adults to use properly

2.2.9

base pack

unit pack

smallest pack (2.1.3) with identical or different products that are to be supplied at the same time

2.2.10

commercial package

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

NOTE Adapted from NATO glossary of packaging terms and definitions ^[6].

2.2.11

consolidated pack

more than one package grouped together to facilitate handling operations

2.2.12**containerization**

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

2.2.13**overpack**

enclosure generally used by a single consignor to contain one or more packages consolidated into a single unit to facilitate easy handling and stowage during transport

NOTE 1 Adapted from United Nations Recommendations on the Transport of Dangerous Goods ^[9].

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

2.2.14**packaging chain**

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

2.2.15**container**

(for packaging) non-specific receptacle capable of closure

cf. 2.2.1.

2.2.16**flexible packaging**

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

2.2.17**rigid packaging**

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

2.3 Types of packaging (product)**2.3.1****bag**

flexible packaging 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 "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 or metal ties under tension

NOTE 1 It may also be wrapped.

NOTE 2 Adapted from NATO glossary of packaging terms and definitions ^[6].

2.3.4**barrel**

packaging of circular cross-section, with greater length than breadth, with convex sides and two flat ends of equal diameter

NOTE A barrel is normally made of wooden staves bound together with hoops.

2.3.5
bottle

rigid packaging, typically of glass or plastic, having a comparatively narrow neck or mouth, with a closure and usually no handle

2.3.6
jar

small rigid packaging of glass, plastic or earthenware, with a wide mouth

2.3.7
box

rigid packaging with rectangular or polygonal sides, usually completely enclosing the contents

NOTE The sides may contain apertures for handling or ventilation.

2.3.8
carton

folding collapsible packaging generally made from boxboard

NOTE Although this term is in general use in English, it might not have an equivalent term in other languages.

2.3.9
case

non-specific term for transport packaging, often used to refer to a box

2.3.10
crate

transport packaging with incomplete surfaces

NOTE 1 Adapted from United Nations Recommendations on the Transport of Dangerous Goods^[9].

NOTE 2 In the USA and some other areas, crates may be fully sheathed.

2.3.11
wirebound box

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

NOTE This type of box is usually closed for shipment by twisting of the wire ends or by connecting prefabricated loops.

2.3.12
bundle

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

2.3.13
can

small primary packaging, usually cylindrical and usually made of metal

2.3.14
drum

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

NOTE Barrels are not classified as drums.

2.3.15
non-removable-head drum
tight-head drum

cylindrical packaging whose ends are permanently fixed to the body, with openings for filling, emptying and venting in the top end (head)

NOTE This definition is not applicable to drums used for the transport of dangerous goods.

2.3.16**removable-head drum****open-head drum**

drum whose bottom end is permanently fixed to the body and whose top end can be removed as a lid (head)

NOTE 1 The top may have additional openings.

NOTE 2 This definition is not applicable to drums used for the transport of dangerous goods.

2.3.17**pail**

packaging of circular cross-section, tapered and equipped with a lid and usually a handle

NOTE This definition is not applicable to pails used for the transport of dangerous goods.

2.3.18**unit load****unitized load**

single item or assembly of items designed to enable these to be handled as a single entity

2.3.19**jerrican**

metal or plastics primary packaging of rectangular or polygonal cross-section for liquids

NOTE An aperture on the top or side of the body and a carrying device is usual.

2.3.20**intermediate bulk container****IBC**

primary packaging designed to

- a) have a capacity of 3 m³ (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

[ISO 15867:2003]

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

NOTE 2 Definitions of types of IBCs and related terms can be found in ISO 15867.

2.3.21**collapsible tube**

flexible packaging having a nozzle and cap at one end and closed at the other, serving as both container and dispenser

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 to soak up liquids resulting from leakage, seepage or liquefaction of the contents

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

cushioning material

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

2.4.4

shrink wrap

shrink film

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

2.4.5

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

preservation

application of protective measures, such as cleaning, drying, the use of preservatives and barrier materials, to prevent deterioration

2.5.3

staple

stitch

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

2.5.4

strapping

strip of material, generally of flat or circular cross-section, used to secure packaging or articles within a container, to hold together a bundle or bale, to reinforce a packaging, or to secure packagings or articles to a pallet

2.5.5

tape

strip of flexible material with one or more adhesive faces

2.5.6

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 or transporting goods and loads

[ISO 445:1996]

NOTE Definitions of types of pallet and related terms can be found in ISO 445.

2.5.7

label

piece of paper or other material displaying information and affixed to the packaging or article

NOTE This definition does not apply to labels for the transport of dangerous goods.

2.5.8

tag

label (2.5.7) attached to the packaging or article by means of a tie or other suitable means

2.5.9

adhesive, noun

substance capable of holding materials together by surface attachment

2.5.10

fastener

device that serves to secure one part to another

2.5.11

sealing

method of bonding mating surfaces

2.5.12

heat sealing

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

2.5.13

pressure sealing

cold sealing

sealing under controlled application of pressure and dwell time

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 -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 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 In the generic sense, the term “paper” may be used to describe both paper and board as defined in this International Standard. 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”.

NOTE 3 Adapted from ISO 4046-3:2002.

A.1.2

board

paperboard

certain types of paper frequently characterized by their relatively high rigidity

NOTE 1 See NOTE 2 to A.1.1.

NOTE 2 Adapted from ISO 4046-3:2002.

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 It is customarily shipped in sheets.

NOTE 2 Adapted from ISO 4046-3:2002.

A.1.4

containerboard

paperboard made specifically for the manufacture of corrugated and solid fibreboard packaging

NOTE 1 Basis weight is expressed in grams per square metre (or pounds per 1 000 ft²).

NOTE 2 It is customarily shipped in rolls.

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

[ISO 4046-4:2002]

A.1.6

solid fibreboard

board made from one sheet or several sheets pasted together, often incorporating a lining of kraft or other strong furnish, intended for the manufacture of packing cases and drums

NOTE 1 Solid fibreboard generally has a grammage above 600 g/m².

NOTE 2 Adapted from ISO 4046-4:2002.

A.2

plastics

polymeric material which may be formed into flexible film or rigid packaging

A.3

tin plate

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

A.4

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.5

electrolytic chromium/chromium oxide coated steel

ECCS

tin-free steel

cold-rolled low-carbon mild steel 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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