

UNITED NATIONS
ECONOMIC
AND
SOCIAL COUNCIL



Distr.
GENERAL

E/CN.2/CONF.5/38
4 April 1969

Original: ENGLISH/FRENCH

COMMITTEE OF EXPERTS ON THE TRANSPORT
OF DANGEROUS GOODS

GROUP OF RAPPORTEURS ON THE PACKING
OF DANGEROUS GOODS

Eighth session
Geneva

REPORT OF THE GROUP OF RAPPORTEURS ON ITS EIGHTH SESSION
(3-14 March 1969)

Table of contents

| | <u>Paragraphs</u> |
|---|-------------------|
| INTRODUCTION | 1-3 |
| WORK OF THE NINTH SESSION OF THE GROUP OF EXPERTS ON EXPLOSIVES CONCERNING THE PACKING OF EXPLOSIVES OF CLASS 1. | 4-8 |
| DESCRIPTION OF PACKAGINGS - ILLUSTRATED GLOSSARY | 9-10 |
| DRAFT RECOMMENDATIONS IN RESPECT OF THE PACKING OF DANGEROUS GOODS | 11-27 |
| CODING OF PACKAGINGS | 28 |
| FUTURE SESSIONS | 29-30 |

Annexes

- Annex 1 - Description of packagings - Illustrated glossary.
Amendments to document E/CN.2/CONF.5/R.143/Rev. 1
- Annex 2 - Draft recommendations in respect of the packing of
dangerous goods.
Proposals by the rapporteur of the United Kingdom as
regards protected plastics receptacles.
- Annex 3 - Draft recommendations in respect of the packing of
dangerous goods.
Amendments to document E/CN.2/CONF.5/R.136/Rev. 1
- Annex 4 - List of rapporteurs and observers

REPORT

1. The Group of Rapporteurs on the Packing of Dangerous Goods held its eighth session in Geneva from 3 to 14 March 1969. Rapporteurs and observers attended from the Federal Republic of Germany, Italy, the United Kingdom, the United States of America, the Central Office for International Transport by Rail (OCTI), the International Chamber of Commerce (ICC), the International Air Transport Association (IATA), the International Chamber of Shipping (ICS) and the European Packaging Federation (EPF).
2. The Group adopted the provisional agenda submitted by the Secretariat (E/CN.2/CONF.5/R.149).
3. On the proposal of the rapporteur of the United States, supported by the rapporteur of the United Kingdom, Mr. L. Savi (Italy) was unanimously re-elected Chairman.
WORK OF THE NINTH SESSION OF THE GROUP OF EXPERTS ON EXPLOSIVES CONCERNING THE PACKING OF EXPLOSIVES OF CLASS 1.
4. A member of the Secretariat summarized the work of the Group of Experts at its ninth session relating to the packing of explosives of Class 1.
5. The Group of Experts had considered the "draft recommendations in respect of the packing of dangerous goods" (E/CN.2/CONF.5/R.136/Rev. 1) in so far as they relate to explosives.
6. It had adopted some of the proposals submitted by OCTI in document E/CN.2/CONF.5/R.156: deletion of paragraph 2.1.1, amendment to paragraphs 2.1.2 and 2.2.3, the latter being replaced by a text drafted in more general terms.
7. It had agreed to remove part 5 "Tests to which should be subjected inner and complete packages containing certain explosives" from the draft recommendations on the packing of dangerous goods; it would be reproduced in an Annex* to Volume III of the present Recommendations on the Transport of Dangerous Goods (ST/ECA/81/Rev. 1).
8. Lastly it had decided to review, at the next session - which is to be held immediately before the session of the Group of Rapporteurs beginning on 28 July 1969 the maximum weights shown in the sheets relating to the particular packing requirements for explosives.

*/ Note by the Secretariat: It might be preferable to insert this text in an appendix to Annex 1.

DESCRIPTION OF PACKAGINGS - ILLUSTRATED GLOSSARY

9. The Group expressed its gratitude to the rapporteur of the United Kingdom for the quality of the work which had resulted in the revised draft glossary (E/CN.2/CONF.5/R.143/Rev. 1) and agreed to consider the advisability of adding definitions of terms contained in other sets of international regulations, such as the International Regulations concerning the Carriage of Dangerous Goods by Rail (RID), the International Maritime Dangerous Goods Code prepared by IMCO and the IATA Regulations relating to the Carriage of Restricted Articles by Air.
10. It adopted the amendments and addenda contained in Annex 1 to this report
DRAFT RECOMMENDATIONS IN RESPECT OF THE PACKING OF DANGEROUS GOODS
11. The Group examined a revised version of the "Draft recommendations in respect of the packing of dangerous goods" prepared by the Secretariat (E/CN.2/CONF.5/R.136/Rev.1)
12. It agreed to adopt some of the suggestions made by the RID Safety Committee and contained in document E/CN.2/CONF.5/R.156. The Group did not adopt the other suggestions; the reasons are given below for the most important ones.
13. The preamble remained unchanged (paragraphs 3.1.1 and 3.1.2), because the Group considered it useful to give the explanations contained in this preamble for the benefit of the Governments and organizations to which the recommendations will be made.
14. The suggestion that the term "specifications" should be replaced by "directives" was not accepted, because the word "specifications" had been chosen to distinguish the provisions relating to the description of packagings from those governing performance tests. After considering the possibility of other solutions, the Group finally decided to retain the term "specifications".
15. With regard to the proposal made in connexion with 4.2.1.1.2, it was stressed that, since the provisions of the draft were minimum recommendations, the addition was unnecessary. If that were not the case, all the provisions would have to be similarly revised.
16. With regard to plastics materials (see in particular paragraph 4.2.7.1.1.1) the text had been adopted by the Group, after protracted discussion, in order not to hold up progress in the field of plastics materials. After considering the proposal of the RID Safety Committee, the Group agreed to maintain the existing text.

17. The Group supplemented the draft recommendations with provisions relating to the specifications and performance tests for plastics boxes on the basis of proposals made by the rapporteur of the United States (GRPDG/Conf.Room Doc. 40).
18. The study of the proposals relating to protected glass or earthenware carboys, contained in document GRPDG/Conf.Room Doc. 40 impelled the Group to consider the advisability of maintaining a uniform drop height of 1.20 m for all packages and packagings.
19. After prolonged discussion, the Group concluded that the uniform drop height of 1.20 m should be maintained.
20. It decided to include neither specifications nor provisions relating to performance tests for protected glass and earthenware carboys, since they accounted for only a small proportion of the packagings used in the international traffic of dangerous goods.
21. For the same reason, an identical decision was adopted in the case of protected lead carboys.
22. It considered that aluminium carboys were covered by the provisions on aluminium drums contained in the draft recommendations.
23. During the consideration of certain particular points of document E/CN.2/CONF.5/R.136/Rev. 1, the Group held a lengthy discussion on the advisability of maintaining the stacking test applicable in certain instances and considered whether, in the affirmative case, the wording of the provisions governing this test should be altered. It was finally decided to retain the text of document E/CN.2/CONF.5/R.136/Rev.1.
24. The Group noted that provisions 4.2.24. and 4.2.25. did not cover certain used packagings, the use of which was becoming increasingly common.
25. It considered that the matter could be dealt with by listing all protected plastics packagings under a chapter 4.2.24. It studied a draft provision to that effect drawn up by the rapporteur of the United Kingdom (Annex 2 to this report).
26. In view of the complexity of the problems involved, it requested the rapporteurs to transmit their observations on that draft to the Secretariat by 30 April 1969 so that a decision could be taken at the Group's ninth session (July 1969). The rapporteurs were asked that in sending their comments they should endeavour to remove any possible confusion that may arise from the similarity of completely protected plastics receptacles always intended to be used as a unit, on the one hand, and combinations of plastics inner receptacles placed in outer receptacles, on the other.

27. The amendments to document E/CN.2/CONF.5/R.136/Rev.1, adopted by the Group, are contained in Annex 3 to this report.

CODING OF PACKAGINGS

28. The Group considered the draft on that subject prepared by the Secretariat (E/CN.2/CONF.5/R.146). The proposals contained in that draft for amendments to document E/CN.2/CONF.5/R.136/Rev.1 were accepted subject to modifications; the text finally agreed is contained in Annex 3 to this report.

FUTURE SESSIONS

29. The Group was informed of arrangements made for the next session to begin on 28 July 1969 and to last five working days.
30. The session would be followed by a joint meeting of the Group of Experts on Explosives and the Group of Rapporteurs on the Packing of Dangerous Goods, in order to finalize the draft recommendations to be submitted at the next session of the Committee (October 1969).
-

Annex 1

DESCRIPTION OF PACKAGINGS - ILLUSTRATED GLOSSARY

(E/CN.2/CONF.5/R.143/Rev.1)

Amendments adopted by the Group

1. Preamble

- Phrase in brackets should be deleted.
- In the last line, "the recommendations" should be replaced by "for packagings".
- Footnotes should be deleted.*

2. Index and definitions of terms

Absorbent material

Should read:

"Material particularly capable of absorbing and retaining liquids. When the use of absorbent material is prescribed, the intention is it should prevent liquids contained in inner receptacles from leaking outside the package, in which these receptacles are enclosed, in event of breakage."

Aluminium

Add at the end:

"Commercially pure aluminium is sometimes referred to as pure aluminium."

Aluminium cartouche

To be deleted.

Aluminium drum, non-removable head, with mild ..

To be deleted.

Aluminium (pure)
drum in mild steel cage

To be deleted.

Assembly of hamper and
top protector (glass
carboys)

To be deleted.

*/ At a future session, the Group will ensure that designs reproduced in the glossary are not protected by copyright or otherwise.

Bag)
Sack)

Title should read:

"Bag (or sack)"

Delete footnote.

Three last sentences should be replaced by:

".. Inner and outer receptacles are frequently distinguished by restricting the term "sack" to an outer receptacle and the term "bag" to an inner receptacle. See also under "Bag (or sack), paper".

Bale handle (metal pails)

Title should read:

"Bale handle (metal and plastics pails)"

Balloon shaped glass carboy

To be deleted.

Barrier (fibre drums)

Should be replaced by:

"Barrier material

A material designed to withstand, to a specific degree, the penetration of liquids, water vapour or certain gases as desired. May serve to exclude or retain such elements without or within a package. Barrier material may include: bitumen, wax kraft paper, metal foil or plastics ... etc."

Battens (or cleats)

In title, "(or cleats)" should be deleted.

Bead (or corrugation)

Should read:

"Bead

A circumferential convex (outward) rib mechanically expanded or pressed out (See figs. 4, 11 and 13)."

Bilge

Should read:

"The largest circumference of a barrel (See fig. 34)."

Blackplate

Insert "uncoated" between "types of" and "mild steel sheet."

Blind closure (cartouches)

Title should read:

"Closure, blind (cartouches)"

Block bottom (multiwall paper sacks)

Title should read:

"Block bottom (multiwall paper bags)"

Block bottom closures (multiwall paper sacks)

Title should read:

"Closures, block bottom (multiwall paper bags)"

| | |
|---------------------------------------|--|
| Block bottom sacks | Title should read: "Bags, block bottom" |
| Body (drums) | Should read: "In relation to steel drums, the term "shell" is also employed. (See figs. 1, 24 and 28)" |
| Body seam (drums) | Delete in the first line "Double seam". |
| Bolted closures (drums) | Title should read: "Closures, bolted (drums)" |
| Box (or case) | Delete brackets in the second line and insert "or other suitable" after "plastics". Delete asterisks as well as corresponding footnotes. To be deleted. |
| Box with body sleeve | To be deleted. |
| Brazed | Should read: |
| "Brazing | Hard soldering using a spelter of hard metal such as brass". |
| Bung | Should read: |
| "Bung (metal or plastics drums) | A threaded piece of material to fit a screwed flange (See figs. 1, 15, 16 and 40). See also under "plug". |
| Can, metal | Delete asterisks and footnotes. Add: "The term "can" in ordinary usage may also be applied to receptacles without outer packaging. The term is not used in this sense in the glossary." In the first line, insert "or protect" after "to seal". |
| Cap | Title should read: |
| Cap seal | "Seal, cap" |
| Capacity (drums) | Add: "Unless otherwise stated, when the term "capacity" is used, it applied to nominal capacity". |

| | |
|--|---|
| Carboy | In the third line, insert "other than steel" after "metal" and delete "transported". |
| Cardboard | Add: "See under "Solid fibreboard"". |
| Cartouche | In the last line, delete "special". |
| Cartridge | To be deleted. |
| Chimb (or chime) | Delete brackets in the first and second lines. In the third line, delete " <u>or of a barrel</u> ". Asterisks and footnotes to be deleted. |
| Chimb (or chime) hoop | Title should read: "Chimb hoop (or chime hoop)" |
| Chimb (or chime) reinforcement (drums) | Title should read: "Chimb reinforcement (or chime reinforcement) (metal drums)" |
| Chipboard | Should read: "(a) Low grade fibreboard made mainly from waste paper (b) Reconstituted wood <u>q.v.</u> " |
| Clinch (wooden receptacles) | Add at the end: "..... members of receptacles." |
| Closure, bolted, lug type | New entry to read as follows: |
| "Closure, bolted, lug type | See fig. 27(b)" |
| Closure (cartouches) | Title should read: "Closure, cartouches" |
| Closure (pure aluminium) in mild steel cage | Title should read: "Closure, drum, pure aluminium in mild steel cage" |
| Closures (removable head drums) | Title should read: "Closures, removable head drums" |

Closures (multiwall paper sacks)

Title should read:

"Closures, multiwall paper bags"

Closure (wirebound wooden boxes)

Title should read: "Closure, wirebound wooden boxes"

Coating

Should read:

"Material adherent to the whole of the inner surface of a receptacle; for example, a metal drum."

"lined" is sometimes used with the meaning of "coated" "

Convolute winding (fibre packagings)

Delete in the title "(fibre packagings)"

Add "See fig. ..." (new drawing)

Corrugated fibreboard

Title should read:

"Fibreboard, corrugated"

In the lines 1, 2, 5, 7, 8, 10, 11 and 13: read

"Fibreboard" (instead of "Board")

Corrugation

Should read:

"Corrugations See fig. 10"

(Last line to be deleted)

Crate

Delete:

"... used for packaging articles for which a solid box is not considered necessary."

Crease

Replace "board" by "fibreboard".

Groze

Replace "cask" by "barrel" (twice).

Cylinder, gas

The three last lines should read:

"pressure relief device. The term "bottle" is sometimes used to describe gas pressure vessels. See also under "aerosol dispenser" and "cartouche"."

| | |
|--|--|
| Cylindrical drum | To be deleted. |
| Demi-john (or straight side carboy) | To be deleted. |
| Double locked (or folded) and soldered body seam | To be deleted. |
| Double seam | Last line should read: "together. (See figs. 2, 3(c), 7 and 11)." |
| Double seamed chimb (or chime) | To be deleted. |
| Double seamed ends | To be deleted. |
| Double seamed joins | To be deleted. |
| Drum | Delete sentence in brackets and footnotes. Add at the end: "See also under "Pail" ". To be deleted. |
| Drum-taper neck | To be deleted. |
| End joint (pure aluminium drum in mild steel cage) | Title should read: "End joint, pure aluminium drum in mild steel cage" |
| Fibreboard) Fibre) | Title should read: "Fibreboard (or fibre)" Delete in the fifth line: "packing" and "but in the <u>glossary</u> [*] " Delete footnote. |
| Fibreboard box | To be deleted. |
| Flanged body) Flanged end) | Add at the end: "(See fig. 2)". |
| Flanged liner | Add to the title: "(fibreboard)". |

| | | |
|--|--|---------------|
| Foamed plastics liner | Should read: "Cushioning, plastics, foamed To be deleted. | See fig. 93." |
| Folded (or double locked) and soldered body seam | Add at the end: "... 7 and 11". To be deleted. | |
| Folded and grooved seam (or lock side seam) | To be deleted. | |
| Folded sleeve (multiwall paper sacks) | Title should read: "Drum, full aperture (or...)" | |
| Full aperture drum (or full open top drum) | Delete: "See fig. 24". Add at the end: "... and 107". | |
| Gasket | To be deleted. | |
| Glass aerosol dispenser | To be deleted. | |
| Glass carboy | To be deleted. | |
| Glass carboy in wicker-work hamper | To be deleted. | |
| Glass carboy with outer plastics protection | To be deleted. | |
| Gusset | First line should read: "Three folds in each side of a bag to make a pleat, which allows the bag." Delete footnote. Delete at the end "(see solid fibreboard)". | |
| Gutta percha | Title should read: "Head (or end)". | |
| Hardboard | To be deleted. | |
| Head or end | Replace in the first line: "cask" by "barrel". | |
| Heavy duty drum without rolling hoops | Title should read: "Plug, inner". | |
| Hoop (wooden receptacles) | Delete: "See also under "Cap seal". | |
| Inner plug | | |

Joint, comb

New entry to read as follows:

"Joint, comb See fig. ..." (new drawing).

Jerrican

Delete:

"In the [glossary]^{*/}" and footnote.

After: "... figures 44 to 46", insert:

"Such metal jerricans would normally be carried without protection."

Jute (burlap) bag,
waterproof^{**}

Title should read:

"Bag (or sack), jute (burlap), waterproof"

Delete footnote.

In the first line, delete:

"(i.e. an inner receptacle)".

At the end, add:

"See also under "Bag (or sack), textile".

Keg

To be deleted.

Kraft liner

To be deleted.

Lead coated mild steel

Title should read:

"Steel, mild, lead-coated".

Delete asterisk and footnote.

First line should read:

"Where lead coating is specified for mild steel drums, lead should be bonded to the sheet, usually after"

Add at the end:

"See also under 'Turnplate'".

Leather pulp board

To be deleted

Leg, closing ring

New entry to read as follows:

"Leg, closing ring See fig. 28".

Lined with ...

New entry to read as follows:

"Lined with, to line with (paper, plastics film, etc.)

Indicates the use of a separate sheet of paper, plastics film, etc., in a wooden box, for example."

Lever action closure

Title should read:

"Closure, lever action".

Light duty drum without
rolling hoops

To be deleted.

Liner (metal or plastics
receptacles)

In the first line, insert "flexible" after
"loose".

Liner
(fibreboard packagings)

2. In the last line, delete "and/".

Metal aerosol dispenser

To be deleted.

Metal cartouche

To be deleted.

Metal drum

Title should read:

"Drum, metal".

Metal edge plywood box

To be deleted.

Metal jerrican

To be deleted.

Metal lid type
(fibreboard drums)

To be deleted.

Multiwall paper sack

Should read:

"Bag, multiwall paper". See under "Bag
(or sack) paper."

Neoprene gasket (cartouches)

To be deleted.

Non-removable head metal
drum (.....)

Title should read:

"Drum, metal, non-removable head (or drum, metal,
fixed end, or drum, metal, tight head)"

In the first line, replace "and/or ends" by
"and/or top heads".

Non-removable head metal
drum with bolted closure

To be deleted.

| | |
|--|--|
| Non-removable head metal drum with pressed out... | To be deleted. |
| Non-removable head metal drum with wide aperture, bolted | To be deleted. |
| Non-removable head plastics drum | To be deleted. |
| Non-reusable | New entry to read as follows: "Non-reusable As applied to receptacles, those which are in fact used for the transport of dangerous goods only once." |
| Non-stackable plastics carboy | To be deleted. |
| Open mouth non-gussetted multiwall paper sacks | To be deleted. |
| Open mouth gussetted multiwall paper sacks | To be deleted. |
| Outage (or ullage) | Should read: "The amount of vacant space left in a receptacle to accommodate thermal expansion of the contents". |
| Outer or sole packagings | New entry to read as follows: "Outer or sole packaging, This includes single outer packagings such as metal drums and combination packagings such as protected carboys or metal drums with liner. See figs. 94 and 95." |

- Packaging Should read:
 "Any receptacle or component used to contain or protect
 the contents. This term is sometimes used as synonym of packing.
- Packing Beginning of first line should read:
 "The art and operation by which articles or commodities are
 enveloped in wrapping and/or enclosed in packagings or otherwise
 secured."
 Second sentence to be deleted.
- Pail In the sixth line, replace "In the USA" by "In some countries."
- Paper-lined sack Title should read:
 "Bag, textile, paper-lined"
 In the first line, replace "sack" by "bag".
- Paper bag)
 Paper sack) Title should read:
 "Bag (or sack), paper"
 Last sentence to be deleted.
 Footnote to be deleted.
- Paperboard book^{**/} To be deleted.
 Footnote to be deleted.
- Pasteboard First line should read:
 "A type of solid fibreboard manufactured by the combination
 of several layers".
 Add:
 "This type of material would normally be included in the
 the general heading of solid fibreboard."
- Pasted, pasted and
 stepped, block
 bottom.... To be deleted.
- Pasted valve non-
 gusseted sack To be deleted.
- Pill box lid type
 fibreboard drum To be deleted.
- Pillow sack with
 valve sleeve To be deleted.

| | |
|--|---|
| Pillow sack with welded closure | To be deleted. |
| Plastics | New entry to read as follows: |
| "Plastics" | Include a great variety of synthetic materials used for packagings, among them are: polyolefine, polyethylene, PVC, etc.." |
| Plastics cartouche | To be deleted. |
| Plastics drums | To be deleted. |
| Plastics fabrics | New entry to read as follows: |
| "Plastics fabrics" | "Material woven of stretched tapes or mono filaments of high density polyethylene, polypropylene or other plastics material." |
| Plastics film sacks | To be deleted. |
| Plastics jerricans | To be deleted. |
| Plug | New entry to read as follows: |
| "Plug (plastics and wooden receptacles)" | An unthreaded piece of material inserted in the orifice of the receptacle and held by friction." |
| Ply (fibreboard packagings) | First line should read: "In the case of solid fibreboard, the complete sheet is" |
| Plywood | Should read: "Laminations of wood veneers glued together with the grain of alternate plies lying at right angles." |
| Plywood box | To be deleted. |
| Plywood drum | Title should read: "Drum, plywood" |
| Plywood drum with metal jointing strip | To be deleted. |
| Plywood drum with plywood jointing strip | To be deleted. |
| Pocket (valve sacks) | To be deleted. |
| Polyolefine carboy in fibreboard (or plywood) drum with pill box lid | To be deleted. |

| | |
|--|--|
| Polyolefine carboy in outer fibreboard case | To be deleted. |
| Polyolefine or PVC receptacle in fibreboard case | To be deleted. |
| Polythene carboy in wire hamper | To be deleted. |
| Polythene liner | To be deleted. |
| Polythene receptable in interrupted chimb steel drum | To be deleted. |
| Polythene receptable in outer steel drum | To be deleted. |
| Press-fit (friction) closure | New entry to read as follows: |
| "Press-fit (friction) closure | A pressed-on closure held by friction between the closure and the orifice." |
| Pressed out bead | In the second line, delete "(or corrugation)" |
| Pressure relief valve | Add to the title: "or pressure valve" |
| Protected glass carboys | To be deleted. |
| Protected plastics receptacles | To be deleted. |
| Protected pure aluminium drum | To be deleted. |
| Pulpboard | In the last line, delete "on a multiple-wire machine". |
| Removable head metal drum (full aperture drum or full open top drum) | Title should read: "Drum, metal, removable head (drum, full aperture, or drum, full open top)" In the second line, insert a comma after "removal". |
| Resilient gasket (metal drums) | To be deleted. |
| Rolling hoops, moulded (plastics drums) | Should read: "See fig. 42" (instead of fig. 40). |
| Rubberized canvas ^{*/} | Delete asterisk and footnote. In the second line, replace "impervious" by "impermeable". |

| | |
|---|---|
| Safety crate | Title should read: "Crate, safety (carboys)" |
| Score | In the second line, read "fibreboard" (instead of "board"). |
| Screw or bolt (removable head drum closure) | Title should read: "Closure, screw or bolt (removable head drum)" |
| Screw cap plastics drum or barrel | To be deleted. |
| Sealing compound | New entry to read as follows: As applied to double seams, a resilient material such as latex, synthetic rubber, polyethylene, etc., designed to make the seam liquid-tight." |
| "Sealing compound | |
| Seam | Add at the end: "...; see also under "Double seam". |
| Self contained valve | Title should read: "Release mechanisme, cartouche". |
| Semi-rigid receptacle | Add at the end: "..., but may not do so either when filled or compressed at pressures encountered in carriage." |
| Separate rolling hoops | Should read: "See figs. 4 and 6". |
| Sewn valve (gussetted) sack | To be deleted. |
| Sift-proof packaging | Should read: "One which prevents the escape of powdered material." |
| Single lap winding | Should read: Drum whose body is made from a single sheet of fibreboard with a vertical joint." |
| "Drum, fibreboard, single lap winding | |
| Soldering | Title should read: "Soldering, soft" |
| Spacer | New entry to read as follows: A framework or other device to maintain a space between parts of a composite package." |
| "Spacer | |
| Solid fibreboard | Should read: Compact, as opposed to corrugated, fibreboard. It includes paperboard, pasteboard, strawboard and chipboard but does not include hardboard." |
| "Fibreboard, solid | |

- Spiral winding Should read:
 "Spiral winding (drums, fibreboard) A style of continuous angular winding to make a cylinder having the various plies partly overlapping one another, as in the case of the body of certain fibreboard drums."
- Square taper jerrican In the second line, replace "a bottom of equal size" by "parallel sides".
- Stainless steel drum ... To be deleted.
- Stapled block bottom (...) Title should read:
 "Bags, multiwall paper, with stapled block bottom".
- Steel drum with separate rolling hoops and reinforced chimbs To be deleted.
- Steel drum with bottom end of reduced diameter and with recess to permit stacking To be deleted.
- Stopper New entry to read as follows:
 "Stopper (glass, earthenware, porcelain receptacles) An unthreaded piece of material inserted in the orifice of the receptacle and held by friction."
- Straight side glass carboy (or Demi-john) Title should read:
 "Carboy, glass, straight side (or Demi-john)"
- Straight side glass carboy with wicker-work hamper To be deleted.
- Strawboard Should read:
 "A low quality fibreboard made entirely or almost entirely of straw having a tendency to brittleness and recognizable by its characteristic straw colour."
 Add at the end "(See figs. 11 and 47)"
- Taper (metal receptacles)
- Taper neck drum To be deleted.
- Textile sack Title should read:
 "Bag (or sack), textile"
 In the third and fourth lines, delete brackets.
 In the third line, add a comma after "(or burlap)".
 In the fourth and sixth lines, replace "sacks" by "bags".
 Add at the end:
 "Bags of plastics fabrics are not regarded as textile bags.
 See under "Plastics fabrics."

| | |
|---|--|
| Tin-plate | In the first line, delete the words "or coil". Replace sentence into brackets by: "(where "tin-plate" is specified, terneplate or tin-terneplate may be used unless otherwise stated)". Delete footnote. |
| Toggle clip closure (plastics drums) | To be deleted. |
| Toggle clip closure | Should read: "See figs. 27(a), 29 and 41." |
| Tube | To be deleted. |
| Turnbuckle closure (removable head drums) | In title, delete "(removable head drums)" |
| Valve aperture (multiwall paper sacks) | Title should read: "Valve aperture (multiwall paper bags)" |
| Valve sack (textile or multiwall paper sacks) | Should read: A valve bag is provided with an opening in a corner through which the bag may be filled. Internal or external sleeves may be fitted so that the pressure of the product inside the filled bag automatically closes the valve." |
| "Bag valve (textile or multiwall paper bags) | |
| Valve sleeve (sacks) | Title should read: "Valve sleeve (bags)" Delete fig. "75". |
| Vencer cask | To be deleted. |
| Vent | Second sentence to be deleted. |
| Vent hole | Should read: "A small opening in a drum or barrel to allow the escape or entry of air during the filling or pouring operations. (See figs. 1 and 40)" |
| Waterproof | In the first line, replace "high" by "extreme". |
| Waterproof paper | Title should read: "Paper, waterproof" In the second line, delete the words "may or". |

| | |
|---|---|
| Waterproof ply | Title should read: "Ply, waterproof (multiwall paper bags)" First line should read: "A layer consisting of, for example, .." |
| Water-vapourproof | Replace "high" by "extreme". |
| Wet cask or barrel | Title should read: "Wet barrel or cask" In text, replace "cask" by "barrel". |
| Wheel-on lid | New entry to read as follows: |
| "Wheel-on lid | A lipped lid curled over to secure it by means of a wheeled tool". |
| Wire hamper (polythene carboys) | Title should read: "Wire hamper (plastics carboys)" |
| Wirebound box (natural wood or plywood) | To be deleted. |
| Wood end box | Title should read: "Box, wood end" |
| Wood frame end box | Title should read: "Box, wood frame end" In text, third line: replace "joint" by "join". |
| Wooden box | To be deleted. |

3. Illustrations

List of illustrations of selected packagings

- Fig. 1 - Add under title: "Commonest nominal capacity range: 60-225 l"
- Delete Code symbols
- The word "body" should read: "body (shell)" and be shown twice.
- Pressing out rolling hoops to be redrawn.

- Fig. 2 - Title should read:
Fig. 2(a) "Double seamed chimb (or chime) of top end".

Fig. to be redrawn

New figure should be added:

Fig. 2(b) "Body and end flanges before seaming"

To be redrawn.

- Fig. 3 - Title should read: "Typical body (side) seams"

- Fig. 4 - Add under title: "Commonest nominal capacity range: 90-225 l"
- Delete Code symbols.
- The indication "chimb" with arrow should appear at the head of the list of indications.
- Beginning of N.B. should read: "N.B. "I" section ..."
- Replace "Head (bottom end)" by "chimb".
- Add the words "Rolling hoop" to the second drawing.
- Fig. 5 - In the title, read "chimb" instead of "chimbs".
- Fig. 6 - In the title, read: "aluminium ...".
- Add under title: "Commonest nominal capacity range: "90-225 l" and delete footnote
- Delete Code symbols
- In N.B., add "are" after "drums".
- Fig. 7 - Add under title: "Commonest nominal capacity range: 5-60 l".
- Delete Code symbols.
- Delete "welded body seam (side) and soldered."
- Fig. 8 - Add under title: "Commonest nominal capacity range: 30-100 l".
- Delete Code symbols.
- Fig. 9 - Add under title: "Commonest nominal capacity range: 10-60 l".
- Delete Code symbols.
- "Resilient" to be deleted before "gasket".
- Top of drawing to be redrawn
- Fig.10 - Add under the title: "Commonest nominal capacity range: 60-225 l"
- Delete Code symbols.
- Show shading in the centre of closure.
- Fig.11 - Add under title: "Commonest nominal capacity range: 5-60 l"
- Delete Code symbols.
- Delete "Body seam welded soldered" and corresponding arrows as well as dotted longitudinal line on the body.
- Fig.12 - Add under title: "Commonest nominal capacity range: 5-60 l"
- Add "handle" and "closure" at the top of cross section.
- Fig.13 - Add under title: "Commonest nominal capacity range: 5-24 l"
- Cross section of the recess to be added.

- Fig.14 Title should read: "'Pure aluminium' drum ..."
- Add under title: "Commonest nominal capacity range: 100-500 l".
 - Show "part of steel cage" (six times), in the first drawing.
 - Two patches on the body to be deleted (first drawing).
 - An explanation should be added about the patches on the top end (first drawing)
 - In the second drawing, delete cross hatching on the aluminium part, and cross hatching to be shown on the steel part.
 - In the third drawing, replace "polythene gasket" by "gasket".
 - In the fourth drawing, lengthen parts of mild steel cage.
- Fig.15 - In the first drawing, different parts of screw bung closure should be shown as follows:
- | | |
|-----------------|-----|
| Bung | (a) |
| Washer (gasket) | (b) |
| Flange | (c) |
- Corresponding parts (a), (b) and (c) should also be shown in the second drawing.
- Add "drum end" with arrow.
- Fig.16 - Top of the drum should be indicated in the drawing showing the flange. Last drawing to be checked.
- Fig.17 - In title, replace "liner" by "sealing disc".
- Fig.19 - Shading should be added in the centre of inner plug. Cross-section to be revised.
- Fig.23 - To be clarified as regards threading.
- Fig.24 - Delete Code symbols.
- Delete "Capacity range: 4-225 l".
- Delete "Head (top end)" and "Head (bottom end)".
- "Lid" should read: "Lid (cover)".
- "Closing ring" should read: "Closing ring, as illustrated with lever action closure".
- Fig.25 - Add under title: "Commonest nominal capacity range: 10-60 l". Delete Code symbol.
- Fig.26 - Title should read: "Metal pail". Delete Code symbol.
- Add under title: "Commonest nominal capacity range: 4-60 l".
- "Bale handle" to be indicated on the right of the drawing.
- "May also have plastics liner" to be deleted.

- Fig.27 - Title should read: "Typical closures, removable head, metal, drums".
Add under (b): "(Lug type bolted closure)".
Add "(e) Latch type closure" with corresponding drawing.
- Page 53 - Title should read: "Detail of closures (metal drums)".
- Fig.28 - In the second drawing, "Top leg of closing ring" and "Bottom leg of closing ring" should be indicated.
- Fig.29 - To be partially redrawn as regards toggle clip.
- Fig.32 - Delete Code symbol and "Gross weight range: up to 400 kg".
"Cotton packing when specified" should read: "Cotton material when specified".
- Fig.33 - Delete "Gross weight range: up to 400 kg".
In the second drawing, "Cotton packing when specified" should read: "Cotton material when specified".
- Fig.34 - Delete Code symbol and "Capacity range:".
The word "stave" should be indicated twice.
- Fig.35 - Delete Code symbol and "Gross weight range:"
- Page 57 - Title should read "FIBREBOARD DRUMS"
- Fig.36 - Add under title: "Commonest gross weight range: 60-200 kg".
Delete Code symbol and capacity ranges.
Add a drawing of convolute winding.
- Fig.37 - Add under title: "Commonest gross weight range: 60-200 kg".
Delete Code symbol.
- Fig.39 - To be deleted. (title "PLASTICS DRUMS" to be kept)
- Fig.40 - Title should read: "Plastics drum, non-removable head, nest-stacking".
Add under title: "Commonest nominal capacity range: 10-60 l".
Delete Code symbol.
Delete "Moulded rolling hoops" and arrow.
Add a drawing showing a cross-section of the recess.
- Page 60 - After fig.40, insert fig.100.
- Fig.41 - Add under title: "Commonest nominal capacity range: 10-225 l".
Delete Code symbol.
Against second drawing, add "Detail of closure".

- Fig.42 - Add under title: "Commonest nominal capacity range: 60-225 l".
Add the words "moulded rolling hoops" with arrows.
- Fig.43 - Add under title: "Commonest nominal capacity range: 5-25 l".
Delete Code symbol.
Indicate "recessed handle" with arrow.
- Fig.44 - Add under title: "Commonest nominal capacity range: 5-60 l".
Delete Code symbol.
- Fig.45 - Add under title: "Commonest nominal capacity range: 5-60 l".
Delete Code symbol.
Delete on the left of the drawing "May also include ...".
- Fig.46 - Add under title: "Commonest nominal capacity range: 5-60 l".
Delete Code symbol.
- Fig.47 - Title should read: "Metal jerrican (customary name: "square taper neck drum")".
Add under title: "Commonest nominal capacity range: 25-60 l".
Delete Code symbol, and arrow (on the left).
- (Fig.48, Add under title: "Commonest nominal capacity range: 5-60 l".
(49, 50, Delete Code symbol.
(51 and 52
- Fig.53 - Delete Code symbol.
"Battens" should be indicated for each drawing.
- Fig.54(a) Add indication "Metal corrugated fastener".
Add a drawing of "comb joint".
- Fig.55 - Add "Collapsible" at the beginning of title.
and 57 Delete Code symbol and "Gross weight range:".
- Fig.56 - Add to the title: .."(natural wood or plywood)".
- Fig.58 - Delete Code symbol and "Gross weight range:".
- Fig.59 - Delete Code symbol and "Gross weight range:".
"Plywood sheet" and "Battens" should be indicated for each drawing.
- Fig.60,
61 and 63 Delete Code symbol and "Gross weight range:".
- Page 80 - To be cancelled.
- Fig.64 - Delete Code symbol and "Gross weight range:".
- Fig.65 - Delete "Gross weight range:".
Indication "Body sleeve" with arrow should appear.
- Fig.66 - Delete "Gross weight range:".
- Fig.67 - Delete Code symbol and "Gross weight range:".
- Page 84 - To be deleted.

Page 85 - Title should read: "TEXTILE BAGS AND BAGS OF WOOWEN PLASTICS FABRICS"

Fig.72 - In title, replace "sacks" by "bags".

Add under title: "Commonest gross weight range: up to 100 kg".

Delete Code symbol.

Fig.73 - Add under title: "Commonest gross weight range: up to 100 kg".

Delete Code symbol.

Indicate "Plastics liner" with arrow.

Page 86 - To be cancelled.

Page 87 - Title should read: "BAGS OF PLASTICS FILM".

Fig.74,

75 and 76 Add under title: "Commonest gross weight range: up to 50 kg".

Delete Code symbol and indications on bags.

Page 88 - Delete Code symbol.

Fig.77,

78 and 79 Add under each title: "Commonest gross weight range: up to 50 kg".

Fig.85 - In title, replace "sacks" by "bags".

Add under title: "Commonest gross weight range: up to 50 kg".

Delete Code symbol.

Mention on the left should read: "External valve sleeve, or tuck in sleeve" (rest unchanged).

Fig.86 - Title should read: "Pasted valve (non gusseted) multiwall paper bags".

Add under title: "Commonest gross weight range: up to 50 kg".

Mention on the left should read: "External valve sleeve, or tuck in sleeve, ..." (rest unchanged).

Page 91 - Title should read: "PROTECTED GLASS CARBOYS".

Fig.87 - Add under title: "Commonest nominal capacity range: 25-60 l".

Delete footnote and Code symbol.

Fig.88 - In (b) replace "Hamper" by "Crate".

In (c) replace "Safety crate" by "Outer crate (safety crate)".

Fig.89 - Title should read: "Balloon shaped glass carboy ...".

Add under title: "Commonest nominal capacity range: 25-60 l" and delete footnote.

Delete Code symbol.

- Fig.90 - In title, delete "or earthenware".
and 92 Under title, add: "Commonest nominal capacity: 25 l" and delete footnote.
Delete Code symbol.
- Fig.93 - Add under title: "Commonest nominal capacity range: 30-60 l" and delete footnote.
Delete Code symbol.
Delete labels on the upper part of the body.
On the left, replace "liner" by "cushioning" and modify arrow to show where is the cushioning.
- Page 96 - To be cancelled.
- Page 97 - Title to be placed into brackets.
- Fig.94 - Title should read: "Plastics receptacle ..." (rest unchanged).
Add under title: "Commonest nominal capacity range: 45-205 l".
Delete Code symbol.
"Polythene liner" to be replaced by "Inner plastics drum".
"Steel outer drum" should read: "Outer steel drum".
- Fig.95 - Title should read: "Plastics receptacle ..." (rest unchanged)
Add under title: "Commonest nominal capacity range: 10-60 l".
Delete Code symbol.
"Polythene liner" should read "Inner plastics drum".
"Steel drum" should read: "Outer steel drum".
- Fig.96 - Title should read: "Plastics carboy ..." (rest unchanged)
Add under title: "Commonest nominal capacity range: 10-60 l".
Delete Code symbol.
- Fig.97 - Title should read: "Plastics carboy in fibreboard or plywood drum with pillbox lid".
Add under title: "Commonest nominal capacity range: 10-60 l".
Delete "N.B. Outer drum ...".
- Fig.98 - Title should read: "Plastics receptacle in fibreboard case".
Add under title: "Commonest nominal capacity range: 5-20 l".
- Page 99 - Title should be placed into brackets.
- Fig.99 - Title should read: "Plastics carboy in ..." (rest unchanged).
Add under title: "Commonest nominal capacity range: 20-60 l".
Delete Code symbol.

- Fig.100 - Drawing to be placed after fig. 40.
In title, replace "carboy" by "drum".
Add under title: "Commonest nominal capacity range: 20-60 l".
- Page 101 - Title should read: "AEROSOL DISPENSERS AND CARTOUCHES
(Inner receptacles)".
- Fig.102 - The indication "Dip tube" with arrow should appear.
Replace "P.V.C. coating" by "Plastics coating".
- Fig.104 - It should be checked if valve complies with the definition of
cartouche.
Cross-section of the lower part of the valve to be added.
- Fig.106 - The indication "Diaphragm" with arrow should appear (at the centre of
blind closure).
- Fig.107 - Title should read: "Cartouche release mechanism (operated by
adaptor)".
"Neoprene" before "gasket" is to be deleted.
- Fig.108 - "BUTANE" on the body should be deleted.
-

Annex 2

DRAFT RECOMMENDATIONS IN RESPECT OF THE PACKING OF
DANGEROUS GOODS

Proposals by the rapporteur of the United Kingdom

4.2.24

Protected Plastics Receptacles

Type 1 - Integral composite packagings

- 1 (a) - Outer sheet steel protection
- 1 (b) - Outer fibreboard drum
- 1 (c) - Outer plywood drum

Type 2 - Protected plastics carboys

- 2 (a) - Outer steel crate
- 2 (b) - Outer fibreboard drum
- 2 (c) - Outer plywood drum
- 2 (d) - Outer fibreboard box

Type 3 - Plastics bag in a box

- 3 (a) - Outer fibreboard box
- 3 (b) - Outer plywood box

4.2.24.1.

Specifications

Plastics receptacle

4.2.24.1.2

As materials for the construction of the plastics receptacle only the following should be used:

4.2.24.1.2.1.

Polyethylene.

4.2.24.1.2.2.

Other plastics materials provided that:

- they are at least as effective as polyethylene in protecting the contents of the receptacles;
- they have at least the same ability as polyethylene to withstand the wear and tear incidental to normal transport: effects of impact, vibrations, temperature, light, ageing, etc.

4.2.24.1.3.

Additives should be compatible with the contents, should not adversely affect physical properties of the material and should retain their effectiveness during the life of the receptacle.

4.2.24.1.4.

Material from used receptacles should not be used for manufacturing new receptacles.

4.2.24.1.5.

If ultra-violet light protection is required for partially protected plastics receptacles, it should be provided by impregnation of material with carbon black or other equally efficient pigments of inhibitors.

- 4.2.24.1.6. The thickness of the walls of partially protected plastics receptacles should be appropriate to the capacity of the receptacle and to the duty it is required to perform, taking into account the risk of penetration and abrasion.
- 4.2.24.1.7. The diameter of openings of receptacles destined to contain liquids of low viscosity should not exceed 7 cm.
- 4.2.24.1.8. Closures should be of screw threaded type or fastened by a screw-threaded device.
- 4.2.24.1.9. The sectional shape of the thread should be such that the cap is held firmly in place when tightened. Closures should be so designed that they can be effectively secured. Where substances emit gases, plastics receptacles should be fitted with a special closure which will prevent excess internal pressure, leakage of the liquid and the ingress of foreign substances into the receptacle.
- 4.2.24.1.10. The inner plastics drum should fit snugly inside the outer protection which should be free from any projection which may abrade the plastics material.

Outer protection

Type 1(a) - Outer sheet steel protection

- 4.2.24.1.11.1. Sheet should be of suitable steel and of adequate gauge in relation to the drum's capacity and to the duty it is required to perform.

Types 1(b) and 2(b) - Outer fibreboard drum

- 4.2.24.1.11.2. The drum should consist of convolutely wound plies secured together with water-resistant adhesive.

Types 1(c) and 2(c) - Outer plywood drum

- 4.2.24.1.11.3. The wood used should be well-seasoned, commercially dry and free from defects that would lessen the effectiveness of the drum for the purpose intended.

At least 2-ply plywood should be used for the body and at least 3-ply plywood for heads; all adjacent plies should be firmly glued together cross grain with water-resistant adhesive. Body joints should be fastened by steel strips secured by staples or by any other equally efficient method.

Type 2(a) - Outer steel crate

- 4.2.24.1.11.4. - Where applicable the wire protection of the carboys should be free from projection which may abrade the plastics material.

Types 2(d) and 3(a) - Outer fibreboard box

- 4.2.24.1.11.5. - Strong and good quality solid or corrugated double-faced, single or multiwall, fibreboard should be used for outer protection. Corrugated fibreboard should be waterproofed on the outer surface and the inner facings should be water-resistant. The fibreboard should have proper bending qualities and should not be scored. The fluting should be firmly glued to the facing of corrugated fibreboard. All components of fibreboard protection should be efficiently fastened together at all contact areas with a good water-resistant adhesive or equivalent means. Boxes should be cut, creased and slotted so as to permit assembly without cracking surface breaks or undue bending.

Manufacturing joints in the body of boxes should be taped, lapped and glued or lapped and stitched with metal staples. Lapped joints should have an appropriate overlap.

Boxes should be so designed as to provide a good fit to the inner receptacle.

Type 3(b) - Outer plywood box

- 4.2.24.1.11.6. Plywood used should be at least 3-ply. It should be made from well-seasoned rotary cut, sliced or sawn veneer, commercially dry and free from defects that would materially lessen the strength of the box.

All adjacent plies should be glued with water-resistant adhesive.

Boxes should be assembled with grain of outer plywood face in the direction of the longest faces of the box and securely nailed or fastened to corner posts or ends or with other equally suitable fastening devices. The liner surface of the box should be free from projection which may abrade the plastics bag.

- 4.2.24.1.12. Maximum capacity Type 1 - 225 litres
 Type 2 - 60 litres
 Type 3 - 60 litres

4.2.24.2. Performance tests

- 4.2.24.2.1. Types 1(a) and 2(a)) Drop test- as in 4.2.7.2.3
 outer steel protection) Leakage test - as in 4.2.7.2.4
 Hydraulic test - as in 4.2.7.2.5
 Stacking test - as in 4.2.1.2.6

The low temperature conditioning specified in 4.2.7.2.3 should ensure that the inner plastics receptacle reaches a temperature of 0°F (-18°C) or less.

- 4.2.24.2.2. Types 1(b), 1(c), 2(b), 2(c)) (4.2.3.2.3
 Outer fibreboard drums and) Drop test (4.2.7.2.3
 outer plywood drums) Leakage test 4.2.7.2.4
 Hydraulic test 4.2.7.2.5
 Stacking test 4.2.3.2.4

Two series of drop tests are to be carried out in accordance with the conditioning appropriate to plywood and plastics drums.

- 4.2.24.2.3. Type 2(d) - Plastics carboy) (4.2.10.2.3
 in outer fibreboard box) Drop test (4.2.7.2.3
 Leakage test 4.2.7.2.4
 Hydraulic test 4.2.7.2.5
 Stacking test 4.2.10.2.4

Two series of drop tests are to be carried out in accordance with the conditioning appropriate to fibreboard boxes and plastics drums.

- 4.2.24.2.4 Type 3 - Plastic bag in a box Drop test* 4.2.10.2.3
 Leakage test 4.2.7.2.4
 Stacking test 4.2.10.2.4

* Two series of drop tests are to be carried out in accordance with the conditioning appropriate to plastics receptacles (4.2.7.2.3.2) and wooden boxes (4.2.10.2.2).

Annex 3 - Annexe 3

DRAFT RECOMMENDATIONS IN RESPECT OF THE PACKING OF DANGEROUS GOODS
PROJET DE RECOMMANDATIONS SUR L'EMBALLAGE DES MARCHANDISES DANGEREUSES
(E/CN.2/CONF.5/R.136/Rev.1)

Amendments adopted by the Group
Amendements adoptés par le Groupe

.. GENERAL PACKING REQUIREMENTS APPLICABLE TO THE PACKING OF DANGEROUS GOODS OF ALL CLASSES OTHER THAN CLASSES 2 AND 7

CONDITIONS GENERALES D'EMBALLAGE APPLICABLES A L'EMBALLAGE DES MARCHANDISES DANGEREUSES DE TOUTES LES CLASSES AUTRES QUE LES CLASSES 2 ET 7

- | | |
|---|---|
| 1.1. Delete at the end the bracketed expression. Add the following sentence: "When a receptacle is re-used all measures should be taken to prevent contamination." | 1.1. La parenthèse à la fin du point doit être supprimée. Ajouter la phrase suivante: "En cas de réemploi d'un récipient, toutes les mesures doivent être prises pour éviter la contamination." |
| 1.2. Should read: "New receptacles should be able successfully to withstand the prescribed tests. Before re-use, every receptacle should be inspected and found free from corrosion or other damage." | 1.2. Lire: "Les récipients neufs doivent pouvoir subir avec succès les épreuves prescrites. Avant réemploi, chaque récipient doit être contrôlé et exempt de corrosion ou autres dégâts." |
| 1.3. In the fourth line, add "with the contents" after "react dangerously". | 1.3. A la quatrième ligne, ajouter "avec le contenu" après "dangereusement". |
| 1.4. In the second line, insert "permanent" before "distortion". | 1.4. A la troisième ligne, insérer "durable" après "déformation". |
| 1.6. The beginning of second line should read: "Breakage, leakage or puncture ..." | 1.6. Lire le début de la deuxième ligne : "à éviter leur bris, leur coulage ou leur perforation ..." |

- 1.7. In the first line, insert "easily" before "puncturable".
The end of the third line and the beginning of the fourth should read: "; when the inner receptacles contain ..."
Add at the end:
"The absorbent material should not react dangerously with the contents of the inner receptacles".
- 1.8. Should read: "Packages completed as for shipment should be able to withstand the tests prescribed for the intended means of transport."
- 1.9. Add a new paragraph (same text as 2.1.3., the word "dangerously" being inserted after "alter" in the second line).
- 1.10. Add a new paragraph (same text as 2.1.5., the end of the paragraph "by the relevant" being deleted).
- 1.11. Add a new paragraph:
"Where significant internal pressure may develop in a receptacle by the evolution of gas from the contents (arising from temperature increase or other causes), a vent may be fitted provided the gas emitted will not cause danger, taking into account toxicity, inflammability, quantity emitted, etc."
- 1.7. A la première ligne, insérer "facilement" avant "perforés".
Lire à la cinquième ligne : "lorsque les récipients intérieurs contiennent ..."
Ajouter à la fin :
"Le matériau absorbant ne doit pas réagir dangereusement avec le contenu des récipients intérieurs".
- 1.8. Lire : "Les colis prêts pour l'expédition doivent pouvoir subir les épreuves qui sont prévues pour le moyen de transport envisagé."
- 1.9. Ajouter un nouveau paragraphe (même texte qu'en 2.1.3., le mot "dangereusement" étant inséré après "altérer", à la troisième ligne).
- 1.10. Ajouter un nouveau paragraphe (même texte qu'en 2.1.5., la fin du paragraphe "par la réglementation ..." étant supprimée).
- 1.11. Ajouter un nouveau paragraphe :
"Dans les cas où une pression interne notable peut se développer dans un récipient par suite de l'émanation de gaz par le contenu (survenant par suite d'une élévation de température ou autres causes), le récipient peut être muni d'un évent pourvu que le gaz émis ne cause aucun danger du fait de sa toxicité, de son inflammabilité, de la quantité dégagée, etc."

2. SUPPLEMENTARY REQUIREMENTS APPLICABLE TO DANGEROUS GOODS OF CLASS 1
CONDITIONS SUPPLEMENTAIRES APPLICABLES AUX MARCHANDISES DANGEREUSES
DE LA CLASSE 1

- | | | | |
|---------|----------------------------------|--------|-----------------------------------|
| 2.1.2. | To be renumbered 2.1.1.* / | 2.1.2. | A renuméroter 2.1.1.* / |
| 2.1.3. | To be deleted. | 2.1.3. | A supprimer. |
| 2.1.4. | To be renumbered 2.1.2. | 2.1.4. | A renuméroter 2.1.2. |
| 2.1.5. | To be deleted | 2.1.5. | A supprimer. |
| 2.1.6.) | To be renumbered 2.1.3., 2.1.4., | 2.1.6. | A renuméroter 2.1.3., 2.1.4., |
| to | 2.1.5. and 2.1.6., respectively. | à | 2.1.5. et 2.1.6., respectivement. |
| 2.1.9.) | | 2.1.9. | |

3. GENERAL PROVISIONS AND REMARKS APPLICABLE TO ALL TESTS AND TO ALL TYPES OF
PACKAGES OR PACKAGINGS TO BE TESTED
DISPOSITIONS ET REMARQUES DE CARACTERE GENERAL S'APPLIQUANT A TOUTES LES
EPREUVES ET A TOUS LES TYPES DE COLIS OU D'EMBALLAGE A SOUMETTRE AUX EPREUVES

- | | | | |
|----------|--|----------|---|
| 3.2. | No change. | 3.2. | Lire la seconde phrase comme suit: "Il est par conséquent nécessaire de prévoir des épreuves préliminaires sur les prototypes et de répéter, si nécessaire, ces mêmes épreuves de temps en temps pour s'assurer que le colis offerts au transport sont conformes aux normes requises". |
| 3.4. | Text should read: "When coating is prescribed, it should retain its protective properties after the tests." | 3.4. | Lire le texte comme suit: "Lorsqu'un revêtement intérieur est prescrit, il doit conserver ses qualités protectrices après les épreuves". |
| 3.5. | In last sentence: Instead of "should be rejected or" read: "should cease to be used or should be." | 3.5. | Dans la dernière phrase : Au lieu de: "doit être rejeté ou" lire "ne doit plus être utilisé ou doit être." |
| 3.6.2.1. | In the penultimate line, the word "outer" should be deleted. | 3.6.2.1. | Dans l'avant-dernière ligne, le mot "extérieurs" doit être supprimé. |

*/ Note by the Secretariat -
2.1.1. has been deleted by the
Group of Experts on Explosives

*/ Note du Secrétariat -
2.1.1. a été supprimé par le groupe
d'experts en matières et objets
explosibles.

4. SPECIFICATIONS FOR OUTER OR SOLE PACKAGINGS AND PERFORMANCE TESTS

SPECIFICATIONS RELATIVES AUX EMBALLAGES EXTERIEURS OU UNIQUES ET EPREUVES
A LEUR FAIRE SUBIR

4.1. Should read:

4.1. Lire:

4.1. Code used for depicting outer
or sole receptacles"4.1. Code pour identifier les
récipients extérieurs ou uniques4.1.1. The following figures show the
nature or the shape of the
receptacle:4.1.1. Les chiffres ci-après indiquent
la nature ou la forme du récipient :

- 1 Drum
- 2 Barrel
- 3 Jerrican
- 4 Box
- 5 Carboy
- 6 Bog

- 1 Fût
- 2 Tonneau
- 3 Jerrycan
- 4 Caisse
- 5 Tourie
- 6 Sac

4.1.2. The following letters show
the material:4.1.2. Les lettres ci-après indiquent
le matériau :

- A Steel
- B Aluminium
- C Other metal
- D Natural wood
- F Plywood
- G Reconstituted wood
- H Fibreboard
- K Plastics material
- L Glass
- M Textile
- N Multi-ply paper -
not waterproofed
- P Multi-ply paper -
waterproofed

- A Acier
- B Aluminium
- C Autres métaux
- D Bois naturel
- F Bois contre-plaqué
- G Bois reconstitué
- H Carton
- K Matière plastique
- L Verre
- M Textile
- N Papier à plusieurs épaisseurs
- non imperméabilisé
- P Papier à plusieurs épaisseurs
- imperméabilisé

In the case of combination packagings
(4.2.24^{*}), two letters are used, the
first one to indicate the material
which is protected, the second to indicate
the material of the outer protection.

Dans le cas d'emballages combinés
(4.2.24^{*}), on utilise deux lettres,
la première indique le matériau qui
est protégé, la seconde celui de
la protection extérieure.

*/ Note by the Secretariat: To be
confirmed by the Group.

*/ Note du Secrétariat :
A confirmer par le groupe.

- | | |
|---|---|
| <p>4.1.3. The second number shows differences in the basic nature or shape of the receptacle (e.g. "removable head" in the case of steel drums).</p> <p>4.1.4. Where only slight variations distinguish receptacles one from another, a small letter (a, b, c, etc.) is added".</p> <p>4.2.1. Should read: "STEEL DRUMS (1A1 - non-removable head, reusable 1A1a - non-removable head, reusable, reinforced 1A1b - non-removable head, reusable, reinforced and with welded closure flange 1A1c - non-removable head, reusable, lead coating 1A1d - non-removable head, reusable, with coating other than lead 1A2 - removable head, reusable 1A2a - removable head, reusable, reinforced 1A2b - removable head, reusable, with coating other than lead 1A3 - non-removable head, non-reusable 1A4 - removable head, non-reusable)"</p> | <p>4.1.3. Le second chiffre indique les différences dans la nature ou la forme de base du récipient (ainsi "à ouverture totale" dans le cas de fûts en acier).</p> <p>4.1.4. Lorsque seules de légères différences distinguent des récipients, une lettre minuscule (a, b, c, etc.) est ajoutée."</p> <p>4.2.1. Lire : "Fûts en acier (1A1 - ouverture partielle, réutilisable 1A1a - ouverture partielle, réutilisable, renforcée 1A1b - ouverture partielle, réutilisable, renforcée avec collerette de fermeture fixée par soudure 1A1c - ouverture partielle, réutilisable, avec revêtement intérieur en plomb 1A1d - ouverture partielle, réutilisable, avec revêtement intérieur autre qu'en plomb 1A2 - ouverture totale, réutilisable 1A2a - ouverture totale, réutilisable, renforcée 1A2b - ouverture totale, réutilisable, avec revêtement intérieur autre qu'en plomb 1A3 - ouverture partielle, type perdu 1A4 - ouverture totale, type perdu.)"</p> |
|---|---|

- | | | | |
|-------------|--|-------------|--|
| 4.2.1.1.2. | Should read: "Body seams should be welded, except those of 1A3 and 1A4 (non-reusable) drums which may be either welded or folded and grooved." | 4.2.1.1.2. | Lire : "Les joints du corps doivent être soudés, sauf ceux des fûts 1A3 et 1A4 (de type perdu) qui peuvent être soit soudés, soit repliés et agrafés." |
| 4.2.1.1.3. | In the first line, "X1A7" should read "1A3 and 1A4." | 4.2.1.1.3. | A la première ligne, "X1A7" doit se lire "1A3 et 1A4." |
| 4.2.1.1.4. | Should be completed by: "Beading under rolling hoops or spot welding should not be allowed." | 4.2.1.1.4. | A compléter par: "Les bourrelets sous les cercles de roulement et la soudure par points ne doivent pas être admis." |
| 4.2.1.1.5. | Should now refer to drums: 1A1a, 1A1b, 1A1c, 1A1d, 1A2a and 1A2b. | 4.2.1.1.5. | Se référer maintenant aux fûts : 1A1a, 1A1b, 1A1c, 1A1d, 1A2a et 1A2b. |
| 4.2.1.1.6. | First sentence to be deleted. Remaining sentence should refer to drums: 1A1b and 1A1c. | 4.2.1.1.6. | Supprimer la première phrase. Dans la phrase unique, se référer aux fûts: 1A1b et 1A1c. |
| 4.2.1.1.7. | First reference should read "1A1c"; second reference should read "1A1d and 1A2b." | 4.2.1.1.7. | Se référer la première fois à "1A1c" et la seconde fois à "1A1d et 1A2b." |
| 4.2.1.1.9. | In the fourth line, replace "6,5" by "7". Delete brackets in the third and fourth line. Delete asterisk and footnote. The fifth line should refer to 1A3 and 1A4. | 4.2.1.1.9. | A la quatrième ligne, remplacer "6,5" par "7". Supprimer les crochets des troisième et quatrième lignes. Supprimer l'astérisque et la note de bas de page. A la cinquième ligne, se référer à 1A3 et 1A4. |
| 4.2.1.1.11. | Should read: <u>Maximum net weight of contents:</u> 1A1, 1A1a, 1A1b, 1A1c, 1A1d and 1A3: 300 kg. 1A2, 1A2a, 1A2b and 1A4: 400 kg. | 4.2.1.1.11. | Lire : <u>Poids net maximal du contenu :</u> 1A1, 1A1a, 1A1b, 1A1c, 1A1d et 1A3 : 300 kg. 1A2, 1A2a, 1A2b et 1A4: 400 kg. |

4.2.1.2.1. Leakage test: 4.2.1.2.1.

Should read:

"1A1, 1A1a, 1A1b, 1A1c,
1A1d and 1A3 and, if destined
to contain certain solids,
1A2, 1A2a, 1A2b and 1A4".

Hydraulic test:

Should read:

"1A1, 1A1a, 1A1b, 1A1c, 1A1d
and 1A3".

4.2.1.2.3.5. (French only)

4.2.1.2.3.5.

4.2.1.2.4.3. Should read: 4.2.1.2.4.3.

Testing method

"The receptacle should be
immersed in water. The
manner of maintaining the
receptacle under water should
not affect the validity of
the test.

Alternatively the receptacle
may also be covered with a soap
solution, heavy oil or other
suitable liquid on seams and
any other place where leakage
could occur. Other methods
of equal efficiency such as the
air pressure differential test
(air-pocket tester) may also
be used."

Epreuve d'étanchéité :

Lire :

"1A1, 1A1a, 1A1b, 1A1c, 1A1d
et 1A3 et, s'ils doivent
contenir certains solides, 1A2,
1A2a, 1A2b et 1A4".

Epreuve de pression hydraulique

Lire :

"1A1, 1A1a, 1A1b, 1A1c, 1A1d
et 1A3".

Lire comme suit la dernière

ligne: "considérée plus
faible^{3/} que les joints
circulaires".

Lire :

Manière de procéder à l'épreuve

"Le récipient doit être placé
sous l'eau. La manière de
maintenir le récipient sous
l'eau ne doit pas fausser le
résultat de l'épreuve.

Le récipient peut aussi, sur
ses joints ou toute autre
partie où pourrait se produire
une fuite, être couvert de
mousse de savon, d'huile
lourde ou de tout autre liquide
approprié. D'autres
méthodes d'efficacité
équivalente telles que
l'épreuve de pression différen-
tielle (air-pocket tester)
peuvent aussi être utilisées."

- | | |
|--|---|
| 4.2.1.2.6.3. In the fourth line, delete "the" before "transport". Delete brackets in the ninth and thirteenth lines. | 4.2.1.2.6.3 <u>[anglais seulement]</u> Supprimer les crochets aux huitième et treizième lignes. |
| 4.2.2. "X1B1" and "X1B2" should be replaced by "1B1" and "1B2", respectively. | 4.2.2. "X1B1" et "X1B2" à remplacer respectivement par "1B1" et "1B2". |
| 4.2.2.1.2. In the last line, replace "6,5" by "7". Delete asterisk and footnote. | 4.2.2.1.2. A la dernière ligne, remplacer "6,5" par "7". Supprimer l'astérisque et la note de bas de page. |
| 4.2.2.1.3. "X1B2" in the first line should be replaced by "1B2". | 4.2.2.1.3. Remplacer à la première ligne "X1B2" par "1B2". |
| 4.2.2.1.5. "300kg" should be replaced by "400 kg". | 4.2.2.1.5. "300 kg" doit être remplacé par "400 kg". |
| 4.2.2.2.1. X1B1 and X1B2 should be replaced by 1B1 and 1B2, respectively. | 4.2.2.2.1. X1B1 et X1B2 à remplacer respectivement par 1B1 et 1B2 |
| 4.2.3. X3G1 should be replaced by 1F2. | 4.2.3. X3G1 doit être remplacé par 1F2. |
| 4.2.3.1.4. In the second line, delete brackets (twice). | 4.2.3.1.4. Supprimer les crochets aux deuxième et troisième lignes. |
| 4.2.3.2.2. The last line should read: "...temperature of 68°F ± 3.5°F (20°C ± 2°C)." | 4.2.3.2.2. <u>[anglais seulement]</u> . |
| 4.2.3.2.3.6. First sentence of the text should read: "There should be no serious rupture of any of the tested drums, nor any rupture or leakage of the inner receptacles they may contain." | 4.2.3.2.3.6. Lire la première phrase : "Il ne doit y avoir ni rupture importante des fûts ayant subi les épreuves, ni rupture ou fuite des récipients intérieurs qu'ils peuvent contenir". |

- 4.2.3.2.4.2. Delete brackets in the ninth and thirteenth lines:
In the fourth line, delete "the" before "transport,".
- 4.2.3.2.4.3. Text to be replaced by:
"There should be no serious rupture of any of the tested drums, nor any rupture or leakage of the inner receptacles they may contain. The drum should not show any deformation likely to reduce its strength or to cause instability in stacks."
- 4.2.4. X3F1 should read: 2D1
- 4.2.4.2.4.3. To be deleted.
- 4.2.4.2.4.4.) To be renumbered:
- 4.2.4.2.4.5.) 4.2.4.2.4.3.
4.2.4.2.4.4.
- 4.2.4.2.5.3. To be replaced by the text in 4.2.1.2.6.3.
Delete footnote ¹⁰/
- 4.2.5. X3F2 should read: 2D2.
- 4.2.5.2.2. Text to be replaced by
"No specific provisions".
- 4.2.5.2.3.2. To be deleted.
- 4.2.5.2.3.3.) To be renumbered:
- 4.2.5.2.3.4.) 4.2.5.2.3.2.
4.2.5.2.3.5.) 4.2.5.2.3.3.
4.2.5.2.3.6.) 4.2.5.2.3.4.
4.2.5.2.3.5.
- 4.2.3.2.4.2. Supprimer les crochets aux huitième et treizième lignes.
[anglais seulement]
- 4.2.3.2.4.3. Le texte est à remplacer par:
"Il ne doit y avoir ni rupture importante des fûts ayant subi les épreuves, ni rupture ou fuite des récipients intérieurs qu'ils peuvent contenir. Le fût ne doit pas laisser apparaître de déformation susceptible de réduire sa solidité ou d'entraîner un manque de stabilité lorsqu'il est gerbé".
- 4.2.4. X3F1 doit se lire : 2D1
- 4.2.4.2.4.3. A supprimer.
- 4.2.4.2.4.4.) A renuméroter : 4.2.4.2.4.3.
4.2.4.2.4.5.) 4.2.4.2.4.4.
- 4.2.4.2.5.3. A remplacer par le texte du 4.2.1.2.6.3.
Supprimer la note de bas de page ¹⁰/
- 4.2.5. X3F2 doit se lire : 2D2.
- 4.2.5.2.2. Remplacer le texte par :
"Pas de dispositions particulières".
- 4.2.5.2.3.2. A supprimer.
- 4.2.5.2.3.3.) A renuméroter : 4.2.5.2.3.2.
4.2.5.2.3.4.) 4.2.5.2.3.3.
4.2.5.2.3.5.) 4.2.5.2.3.4.
4.2.5.2.3.6.) 4.2.5.2.3.5.

4.2.5.2.3.5. Same amendment as in
4.2.3.2.3.6. ("drums"
being replaced by "barrels");

4.2.5.2.4.3. To be replaced by the text
in 4.2.1.2.6.3.

Delete footnote 11/

4.2.5.2.4.3. Same amendment as in:
4.2.3.2.4.3. ("drums"
being replaced by "barrels");

4.2.6. Should read:

"FIBREBOARDS DRUMS

(1H1 - convolutely
wound plies

1H3 - spirally wound
plies

1H3 - solid fibreboard)."

4.2.6.1.1. No change.

4.2.6.1.4. XLJ1 should read: 1H1.

4.2.6.1.5. XLJ2 should read: 1H2.

4.2.6.1.6. XLJ3 should read: 1H3.

4.2.6.1.7. XLJ1, XLJ2 and XLJ3
should be replaced by
1H1, 1H2 and 1H3,
respectively.

4.2.6.1.8. Same amendment as in
4.2.6.1.7.

4.2.6.2. Should read:

"Performance tests

Provisions as in 4.2.3.2.2.

4.2.3.2.3.

4.2.3.2.4."

4.2.5.2.3.5. Même modification qu'au
4.2.3.2.3.6. ("fûts" étant
remplacé par "tonneaux");

4.2.5.2.4.2. A remplacer par le texte du
4.2.1.2.6.3.

Supprimer la note de bas de
page 11/

4.2.5.2.4.3. Même modification qu'au
4.2.3.2.4.3. ("fûts" étant
remplacé par "tonneaux");

4.2.6. Lire :

"FUTS EN CARTON

(1H1 - fabrication convolute

1H2 - fabrication spirale

1H3 - en carton compact)."

4.2.6.1.1. Remplacer "écrans protecteurs"
par "couches protectrices".

4.2.6.1.4. XLJ1 doit se lire: 1H1.

4.2.6.1.5. XLJ2 doit se lire: 1H2.

4.2.6.1.6. XLJ3 doit se lire: 1H3.

4.2.6.1.7. XLJ1, XLJ2 et XLJ3 doivent être
remplacés respectivement par
1H1, 1H2 et 1H3.

4.2.6.1.8. Même modification qu'au
4.2.6.1.7.

4.2.6.2. Lire:

"Epreuves

Dispositions prévues en 4.2.3.2.

4.2.3.2.

4.2.3.2.

- 4.2.7. XLN1 and XLN2 should read: 1K1 and 1K2, respectively.
- 4.2.7.1.1.2. Footnote 12/ should be renumbered 10/, and should read: "see also 4.2.7.2.2.".
- 4.2.7.1.2. (French only).
- 4.2.7.1.3. Should read:
"Material from used receptacles should not be used for manufacturing new receptacles."
- 4.2.7.1.4. Add to the end:
"including the ability to resist puncture and abrasion".
- 4.2.7.1.5. XLN1 should read: 1K1.
- 4.2.7.1.6. XLN2 should read: 1K2.
- 4.2.7.1.9. XLN1 and XLN2 should read: 1K1 and 1K2, respectively.
- 4.2.7.2. Footnote 13/ to be renumbered 11/.
- 4.2.7.2.2. Read in the fourth line:
"in 4.2.7.1.1. and 4.2.7.1.2. in ..."
- 4.2.7.2.3.6.) Footnotes 14/, 15/ and
4.2.7.2.4.) 16/ should be renumbered
4.2.7.2.4.1.) 12/, 13/ and 14/.
- 4.2.7. XLN1 et XLN2 doivent se lire respectivement 1K1 et 1K2.
- 4.2.7.1.1.2. La note 12/ doit être renumérotée 10/ et doit se lire : voir aussi 4.2.7.2.2.".
- 4.2.7.1.2. A la seconde ligne, lire :
"... noir de carbone ...".
- 4.2.7.1.3. Lire :
"Les matériaux provenant de récipients usagés ne doivent pas être utilisés pour la fabrication de nouveaux récipients".
- 4.2.7.1.4. Ajouter à la fin :
"y compris la capacité de résister à la perforation et à l'abrasion".
- 4.2.7.1.5. XLN1 doit se lire : 1K1.
- 4.2.7.1.6. XLN2 doit se lire : 1K2.
- 4.2.7.1.9. XLN1 et XLN2 doivent se lire respectivement 1K1 et 1K2.
- 4.2.7.2. La note 13/ doit être renumérotée 11/.
- 4.2.7.2.2. Lire à la troisième ligne:
"1.3., 4.2.7.1.1. et 4.2.7.1.2. en ..."
- 4.2.7.2.3.6.) Les notes 14/, 15/ et 16/
4.2.7.2.4.) doivent être renumérotées
4.2.7.2.4.1.) 12/, 13/ et 14/.

- | | |
|--|--|
| <p>4.2.7.2.4.3. Text to be replaced by the same text as in 4.2.1.2.4.3., with the following addition to the second paragraph: "The soap solution, heavy oil or other suitable liquid should not adversely affect the plastics material."</p> | <p>4.2.7.2.4.3. Le texte doit être remplacé par le texte du 4.2.1.2.4.3. avec l'addition suivante au second paragraphe : "La mousse, l'huile lourde ou un autre liquide approprié ne doit pas altérer la matière plastique".</p> |
| <p>4.2.7.2.4.5. Footnotes <u>17/</u>, <u>18/</u> and <u>19/</u> to be renumbered <u>15/</u>, <u>16/</u> and <u>17/</u>.</p> | <p>4.2.7.2.4.5. Les notes <u>17/</u>, <u>18/</u> et <u>19/</u> doivent être renumérotées <u>15/</u>, <u>16/</u> et <u>17/</u>.</p> |
| <p>4.2.7.2.5.3. Text to be replaced by text of 4.2.1.2.5.3.</p> | <p>4.2.7.2.5.3. Texte à remplacer par celui du 4.2.1.2.5.3.</p> |
| <p>4.2.7.2.6.3. Delete in the fifth line asterisk and footnote. Delete brackets in the ninth and thirteenth lines.</p> | <p>4.2.7.2.6.3. Supprimer à la cinquième ligne l'astérisque et la note de bas de page. Supprimer les crochets aux huitième et treizième lignes.</p> |
| <p>4.2.8. Add after title "(3A1)"</p> | <p>4.2.8. Ajouter après le titre : "(3A1)"</p> |
| <p>4.2.8.2. Should read: "<u>Performance tests</u> Provisions as in" (rest without change)</p> | <p>4.2.8.2. Lire: "<u>Enreuves</u> Dispositions prévues en" (reste sans changement)</p> |
| <p>4.2.9. X5N1 should read 3K1.</p> | <p>4.2.9. X5N1 doit se lire 3K1.</p> |
| <p>4.2.9.1.1.2. Footnote <u>20/</u> to be renumbered <u>18/</u>.</p> | <p>4.2.9.1.1.2. La Note <u>20/</u> doit être renumérotée <u>18/</u>.</p> |
| <p>4.2.9.1.3. Same amendment as in 4.2.7.1.3.</p> | <p>4.2.9.1.3. Même modification qu'au 4.2.7.1.3.</p> |

- | | |
|---|---|
| <p>4.2.9.2. Should read: <u>"Performance tests"</u> Provisions as in 4.2.7.2.2. 4.2.7.2.3. 4.2.7.2.4. 4.2.7.2.5. 4.2.7.2.6."</p> <p>4.2.10. X7F1 and X7F2 should read 4D1 and 4D2, respectively.</p> <p>4.2.10.1.3. X7F1 should read 4D1.</p> <p>4.2.10.2.2. Text to be replaced by "No specific provisions".</p> <p>4.2.10.2.3.2. To be deleted.</p> <p>4.2.10.2.3.3.) To be renumbered</p> <p>4.2.10.2.3.4.) 4.2.10.2.3.2.</p> <p>4.2.10.2.3.5.) 4.2.10.2.3.3.</p> <p>4.2.10.2.3.6.) 4.2.10.2.3.4. 4.2.10.2.3.5.</p> <p>4.2.10.2.3.5. Same amendment as in 4.2.3.2.3.6. ("drums" being replaced by "boxes").</p> <p>4.2.10.2.4.2. In the fourth line, delete "the" before "transport". In the fifth line, delete asterisks and footnote. Delete brackets in the ninth and thirteenth lines.</p> <p>4.2.10.2.4.3. Same amendment as in 4.2.3.2.4.3. ("drums" being replaced by "boxes").</p> | <p>4.2.9.2. Lire: <u>"Epreuves"</u> Dispositions prévues en 4.2.7.2.2. 4.2.7.2.3. 4.2.7.2.4. 4.2.7.2.5. 4.2.7.2.6."</p> <p>4.2.10. X7F1 et X7F2 doivent se lire respectivement 4D1 et 4D2.</p> <p>4.2.10.1.3. X7F1 doit se lire 4D1.</p> <p>4.2.10.2.2. Remplacer le texte par: "Pas de dispositions particulières".</p> <p>4.2.10.2.3.2. A supprimer.</p> <p>4.2.10.2.3.3.) A renuméroter 4.2.10.2.3.2.</p> <p>4.2.10.2.3.4.) 4.2.10.2.3.3.</p> <p>4.2.10.2.3.5.) 4.2.10.2.3.4.</p> <p>4.2.10.2.3.6.) 4.2.10.2.3.5.</p> <p>4.2.10.2.3.5. Même amendement qu'au 4.2.3.2.3.6. ("fûts" étant remplacé par "caisses").</p> <p>4.2.10.2.4.2. [anglais seulement].</p> <p>A la cinquième ligne, supprimer les astérisques et la note de bas de page. Supprimer les crochets aux huitième et treizième lignes.</p> <p>4.2.10.2.4.3. Même amendement qu'au 4.2.3.2.4.3. ("fûts" étant remplacé par "caisses").</p> |
|---|---|

- | | | | |
|-------------|---|-------------|---|
| 4.2.11. | X7G1 should read: 4F1 | 4.2.11. | X7G1 doit se lire : 4F1. |
| 4.2.11.2. | Should read: <u>"Performance tests</u> Provisions as in 4.2.10.2.3. 4.2.10.2.4." | 4.2.11.2. | Lire: <u>"Epreuves</u> Dispositions prévues en 4.2.10.2.3. 4.2.10.2.4." |
| 4.2.12. | X7H1 should read: 4G1. | 4.2.12. | X7H1 doit se lire : 4G1. |
| 4.2.12.2. | Same amendment as for 4.2.11.2. | 4.2.12.2. | Même modification qu'au 4.2.11.2. |
| 4.2.13. | X7L1 should read: 4H1. | 4.2.13. | X7L1 doit se lire 4H1. |
| 4.2.13.2. | Same amendment as for 4.2.11.2. | 4.2.13.2. | Même amendement qu'au 4.2.11.2. |
| 4.2.14. | Should read: EXPANDED PLASTICS BOXES (non-reusable) (4K1) | 4.2.14. | Lire : CAISSES EN MATIERE PLASTIQUE EXPANSEE (emballage perdu) (4K1) |
| 4.2.14.1. | <u>Specifications</u> | 4.2.14.1. | <u>Spécifications</u> |
| 4.2.14.1.1. | The box is to consist of two parts of moulded expanded plastics material, a bottom section with cavities for the inner receptacles and a top section that covers, and interlocks with, the bottom section. | 4.2.14.1.1. | La caisse doit comprendre deux parties en matière plastique expansée moulée: une partie inférieure, pourvue d'alvéoles pour les récipients intérieurs et une partie supérieure, qui recouvre la partie inférieure en s'y verrouillant. |
| 4.2.14.1.2. | Both the bottom and top sections shall be designed to provide a snug fit for the inner receptacles. | 4.2.14.1.2. | Les parties supérieures et inférieures doivent être conçues de telle sorte que les récipients intérieurs s'y emboîtent sans aucun jeu. |
| 4.2.14.1.3. | The closure cap for the inner receptacle or receptacles shall not be in contact with the inside of the top section of box. | 4.2.14.1.3. | Le bouchon du ou des récipients intérieurs ne doit pas être en contact avec la surface interne de la partie supérieure de la caisse. |

- | | |
|---|--|
| <p>4.2.14.1.4. The box shall be closed for shipment with a pressure-sensitive cloth or laminated reinforced paper tape, having a tensile strength adequate to prevent opening.</p> <p>4.2.14.1.5. The tape shall be resistant to the effects of outdoor weathering.</p> <p>4.2.14.1.6. <u>Maximum net weight of contents:</u> 30 kg.</p> <p>4.2.14.2. <u>Performance tests</u></p> <p>4.2.14.2.1. <u>Tests required</u></p> <p>Drop test.</p> <p>Stacking test.</p> <p>4.2.14.2.2. <u>Provisions, other than general provision in Part. 3 applicable to all tests</u></p> <p><u>Preparation of packages and packagings for tests</u></p> <p>Inner receptacles destined to contain liquids should be filled to 98% of their capacity with water containing enough sodium chloride or calcium chloride for it to remain liquid at the testing temperature.</p> <p>Packages should be conditioned during the period needed to lower the temperature of the box as a whole to 0° (-18°C) or less.</p> <p>[This provision does not apply to boxes made of polystyrene]</p> | <p>4.2.14.1.4. La caisse est fermée pour l'expédition à l'aide d'une bande de toile collante par pression ou d'une bande de papier laminé entoilé, offrant une résistance à la traction suffisante pour empêcher qu'elle ne s'ouvre.</p> <p>4.2.14.1.5. La bande doit être résistante aux intempéries.</p> <p>4.2.14.1.6. <u>Poids net maximal du contenu:</u> 30 kg.</p> <p>4.2.14.2. <u>Epreuves</u></p> <p>4.2.14.2.1. <u>Epreuves requises</u></p> <p>Epreuve de chute.</p> <p>Epreuve de gerbage.</p> <p>4.2.14.2.2. <u>Dispositions, autres que les dispositions générales de la Partie 3, applicables à toutes les épreuves</u></p> <p><u>Préparation des colis et emballages pour les épreuves</u></p> <p>Les récipients intérieurs destinés à contenir des liquides doivent être remplis à 98% de leur capacité avec de l'eau contenant suffisamment de chlorure de sodium ou de calcium pour demeurer liquide à la température de l'épreuve. Les colis doivent être entreposés durant le temps nécessaire pour permettre d'abaisser la température de la caisse dans son ensemble à -18°C au moins.</p> <p>[Cette disposition ne s'applique pas aux caisses faites de polystyrène]</p> |
|---|--|

- | | |
|--|--|
| 4.2.14.2.3. Drop test | 4.2.14.2.3. <u>Epreuve de chute</u> |
| 4.2.14.2.3.1. <u>Number of samples</u> Three samples | 4.2.14.2.3.1. <u>Nombre d'échantillons</u> Trois échantillons. |
| 4.2.14.2.3.2. <u>Temperature of the box during the test</u> 0°F (-18°C) or less. | 4.2.14.2.3.2. <u>Température de la caisse durant l'épreuve</u> -18°C ou moins. |
| 4.2.14.2.3.3. <u>Target</u> The target should be a rigid, smooth, flat and horizontal surface. | 4.2.14.2.3.3. <u>Aire de réception</u> L'aire de réception doit être une surface rigide, unie, plane et horizontale. |
| 4.2.14.2.3.4. <u>Height of drop: 1.20 m (4')</u> | 4.2.14.2.3.4. <u>Hauteur de chute</u> Hauteur de 1,20 m. |
| 4.2.14.2.3.5. <u>Point of impact</u> The test should consist of six drops (on the same sample): once on each side, bottom and top. | 4.2.14.2.3.5. <u>Point d'impact</u> L'épreuve doit comporter six chutes (sur un même échantillon): une sur le fond, une sur le sommet et une sur chacune des autres faces. |
| 4.2.14.2.3.6. <u>Criteria for passing test successfully</u> There should be no serious rupture of any of the tested boxes nor any rupture or leakage of the inner receptacles they may contain. | 4.2.14.2.3.6. <u>Critères à utiliser pour déterminer si l'épreuve a été subie de manière satisfaisante</u> Il ne doit y avoir ni rupture importante des caisses ayant subi les épreuves, ni rupture ou fuite des récipients intérieurs qu'elles peuvent contenir. |
| 4.2.14.2.4. <u>Stacking test</u> | 4.2.14.2.4. <u>Epreuve de gerbage</u> |
| 4.2.14.2.4.1. <u>Number of samples</u> Three samples. | 4.2.14.2.4.1. <u>Nombre des échantillons</u> Trois échantillons. |
| 4.2.14.2.4.2. <u>Method of testing</u> (Same text as in 4.2.7.2.4.2.) | 4.2.14.2.4.2. <u>Manière de procéder à l'épreuve</u> (Texte du 4.2.7.2.6.3.). |

4.2.14.2.4.3. Criteria for passing the test successfully

There should be no serious rupture of any of the tested drums, nor any rupture or leakage of the inner receptacles they may contain. The drum should not show any deformation likely to reduce its strength or to cause instability in stacks.

4.2.15. Should read:
"STEEL BOXES (for explosives)
(4A1: steel boxes
4A2: steel boxes with liner)" */

4.2.15.2. Add:
"Performance tests
Provisions as in 4.2.10.2.3.
4.2.10.2.4."

4.2.16. Should read:
"TEXTILE BAGS
(6M1a - unlined
6M1b - siftproof
6M1c - waterproof)"
4.2.16.1.2. The beginning of first line should read:
"6M1b - The bag should be ..."

*/ Note by the Secretariat:

To be confirmed by the Group of Experts on Explosives

4.2.14.2.4.3. Critères à utiliser pour déterminer si l'épreuve a été subie de manière satisfaisante

Il ne doit y avoir ni rupture importante des fûts ayant subi les épreuves, ni rupture ou fuite des récipients intérieurs qu'ils peuvent contenir. Le fût ne doit pas laisser apparaître de déformation susceptible de réduire sa solidité ou d'entraîner un manque de stabilité lorsqu'il est gerbé

4.2.15. Lire :
"CAISSES EN ACIER (pour matières et objets explosibles)
(4A1: caisses en acier
4A2: caisses en acier avec revêtement intérieur)

4.2.15.2. Ajouter:
"Epreuves
Dispositions prévues en
4.2.10.2.3.
4.2.10.2.4."

4.2.16. Lire
"SACS EN TEXTILE
(6M1a - sans doublure
6M1b - non tamisant
6M1c - imperméable)"

4.2.16.1.2. XLIV1b doit se lire : 6M1b

*/ Note du Secrétariat:

A confirmer par le groupe d'experts en matières et objets explosibles

- | | |
|---|--|
| <p>4.2.16.1.3. The beginning of first line should read: "CMlc - The bag should be ..."</p> <p>4.2.16.2.3.4.) "Sack(s)" should be 4.2.16.2.3.5.) replaced by "bag(s)".</p> <p>4.2.17. Should read: "BAGS OF PLASTICS FABRICS (6K1)"</p> <p>4.2.17.1.1.) "Sack(s)" should be 4.2.17.1.3.) replaced by "bag(s)". 4.2.17.2.3.4.) 4.2.17.2.3.5.)</p> <p>4.2.18. Should read: "BAGS OF PLASTICS FILM (6K2)"</p> <p>4.2.18.1.1. In the first line, "Sacks" should read "Bags".</p> <p>4.2.18.2. Should read: "Performance tests Provisions as in 4.2.17.2.3."</p> <p>4.2.19. Should read: "PAPER BAGS - NOT WATERPROOFED (6N1)"</p> <p>4.2.19.1.) "Sack(s)" should be 4.2.19.2.2.) replaced by "bag(s)" 4.2.19.2.3.5.) 4.2.19.2.3.6.)</p> <p>4.2.19.2.2. Last line should read: "63°F ± 3.5°F (20°C ± 2°C)"</p> <p>4.2.20. (X11Z1) should read: (6P1).</p> | <p>4.2.16.1.3. X11Vlc doit se lire : 6Mlc</p> <p><u>/anglais seulement/</u> (X11N1) doit se lire : (6K1)</p> <p><u>/anglais seulement/</u></p> <p>(X11N2) doit se lire (6K2).</p> <p><u>/anglais seulement/</u></p> <p>Lire: "Epreuves Dispositions prévues au 4.2.17.2.3." (X11Y1) doit se lire : (6N1).</p> <p><u>/anglais seulement/</u></p> <p><u>/anglais seulement/</u></p> <p>(X11Z1) doit se lire : (6P1).</p> |
|---|--|

4.2.20.2. Should read:
 "Performance tests
 Provisions as in 4.2.19.2.2.
 4.2.19.2.3."

4.2.20.2. Lire:
 "Epreuves
 Dispositions prévues en
 4.2.19.2.2.
 4.2.19.2.3."

4.2.21.)
4.2.22.) To be deleted.
4.2.23)

4.2.21.)
4.2.22.) A suppriner.
4.2.23.)

Annex 4

LIST OF RAPPORTEURS AND OBSERVERS

Chairman: Mr. L. SAVI (Italy)

| | |
|---------------------|---|
| Mr. E. ANKEL | (International Chamber of Commerce) |
| Mr. A. BASSO | (Italy) |
| Mr. H. BLACK | (United Kingdom) |
| Mr. J. BLACKBURN | (United Kingdom) |
| Mr. W. BYRD | (United States of America) |
| Mr. N. GALLETTI | (Italy and European Packaging Federation) |
| Mr. F. GOEMMEL | (Federal Republic of Germany) |
| Mr. W. GÜLLER | (Federal Republic of Germany) |
| Mr. E. GRUNDY | (United States of America) |
| Mr. W. KOBALSKY | (Federal Republic of Germany) |
| Mr. H. KOHL | (International Chamber of Commerce) |
| Mr. A. NIDES | (United States of America) |
| Mr. R. OTTEN-SOOSER | (International Air Transport Association) |
| Mr. L. SAVI | (Italy) |
| Mr. Ch. SCHULTZ | (United States of America) |
| Mr. L. SPENCER | (United Kingdom) |
| Mr. M. SQUIRES | (International Chamber of Shipping) |
| Mr. R. UNCLES | (United States of America) |
| Mr. A. WILDHABER | (Central Office for International Transport by Rail) |
| Mr. A. WOLFF | (Federal Republic of Germany) |
