§ 178.507 Standards for plywood drums.

(a) The identification code for a plywood drum is 1D.

(b) Construction requirements for plywood drums are as follows:

1. The wood used must be well-seasoned, commercially dry and free from any defect likely to lessen the effectiveness of the drum for the purpose intended. A material other than plywood, of at least equivalent strength and durability, may be used for the manufacture of the heads.

2. At least two-ply plywood must be used for the body and at least three-ply plywood for the heads; the plies must be firmly glued together, with their grains crosswise.

3. The body and heads of the drum and their joints must be of a design appropriate to the capacity of the drum and its intended use.

4. In order to prevent sifting of the contents, lids must be lined with kraft paper or some other equivalent material which must be securely fastened to the lid and extend to the outside along its full circumference.


§ 178.508 Standards for fiber drums.

(a) The identification code for a fiber drum is 1G.

(b) Construction requirements for fiber drums are as follows:

1. The body of the drum must be constructed of multiple plies of heavy paper or fiberboard (without corrugations) firmly glued or laminated together and may include one or more protective layers of bitumen, waxed kraft paper, metal foil, plastic material, or similar materials.

2. Heads must be of natural wood, fiberboard, metal, plywood, plastics, or other suitable material and may include one or more protective layers of bitumen, waxed kraft paper, metal foil, plastic material, or similar material.

3. The body and heads of the drum and their joints must be of a design appropriate to the capacity and intended use of the drum.

4. The assembled packaging must be sufficiently water-resistant so as not to delaminate under normal conditions of transport.


(10) If protection against ultra-violet radiation is required, it must be pro-
vided by the addition of carbon black or other suitable pigments or inhibi-
tors. These additives must be compat-
ible with the contents and remain ef-
fective throughout the life of the pack-
aging. Where use is made of carbon
black, pigments or inhibitors other
than those used in the manufacture of
the design type, retesting may be omit-
ted if the carbon black content does
not exceed 2 percent by mass or if the
pigment content does not exceed 3 per-
cent by mass; the content of inhibitors
of ultra-violet radiation is not limited.

(11) Additives serving purposes other
than protection against ultra-violet ra-
diation may be included in the com-
position of the plastic material pro-
vided they do not adversely affect the
chemical and physical properties of the
packaging material.

(12) The wall thickness at every point
of the packaging must be appropriate
to its capacity and its intended use,
taking into account the stresses to
which each point is liable to be ex-
posed. Minimum thickness and mark-
ing requirements in §§ 173.28(b)(4) and
178.503(a)(9) of this subchapter apply to
drums intended for reuse.

(13) Openings for filling, emptying and
venting in the bodies or heads of non-
removable head (1H1) drums and
tergicans (3H1) may not exceed 7.0 cm (3
inches) in diameter. Drums and
jerricans with larger openings are con-
sidered to be of the removable head
type (1H2 and 3H2). Closures for open-
ings in the bodies or heads of drums
and jerricans must be so designed and
applied that they remain secure and
leakproof under normal conditions of
transport. Gaskets or other sealing ele-
mments must be used with closures un-
less the closure is inherently leakproof.

(14) Closure devices for removable
head drums and jerricans must be so
designed and applied that they remain
secure and leakproof under normal con-
ditions of transport. Gaskets must be
used with all removable heads unless
the drum or jerrican design is such
that when the removable head is pro-
perly secured, the drum or jerrican is in-
herently leakproof.

(7) Maximum capacity of drums and
jerricans: 1H1, 1H2: 450 L (119 gallons);
3H1, 3H2: 60 L (16 gallons).

(8) Maximum net mass: 1H1, 1H2: 400
kg (882 pounds); 3H1, 3H2: 120 kg (265
pounds).

§ 178.510 Standards for wooden bar-
rels.

(a) The following are identification
codes for wooden barrels:
(1) 2C1 for a bung type wooden barrel;
and
(2) 2C2 for a slack type (removable
head) wooden barrel.

(b) Construction requirements for
wooden barrels are as follows:
(1) The wood used must be of good
quality, straight-grained, well-sea-
sioned and free from knots, bark, rotten
wood, sapwood or other defects likely
to lessen the effectiveness of the barrel
for the purpose intended.

(2) The body and heads must be of a
design appropriate to the capacity and
intended use of the barrel.

(3) Staves and heads must be sawn or
cleft with the grain so that no annual
ring extends over more than half the
thickness of a stave or head.

(4) Barrel hoops must be of steel or
iron of good quality. The hoops of 2C2
barrels may be of a suitable hardwood.

(5) For wooden barrels 2C1, the di-
ameter of the bung-hole may not ex-
ceed half the width of the stave in
which it is placed.

(6) For wooden barrels 2C2, heads
must fit tightly into crozes.

(7) Maximum capacity of barrel: 250 L
(66 gallons).

(8) Maximum net mass: 400 kg (882
pounds).

§ 178.511 Standards for aluminum and
steel jerricans.

(a) The following are identification
codes for aluminum and steel jerricans:
(1) 3A1 for a non-removable head
steel jerrican;
(2) 3A2 for a removable head steel
jerrican;
(3) 3B1 for a non-removable head alu-
minum jerrican; and