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-
mhimum jerrican; and
(4) 3B2 for a removable head alu-
mhimum jerrican.

(b) Construction requirements for
aluminum and steel jerricans are as
follows:
(1) For steel jerricans the body and
heads must be constructed of steel
sheet of suitable type and adequate
thickness in relation to the capacity of
the jerrican and its intended use. Min-
imum thickness and marking require-
ments in §§173.28(b)(4) and 178.503(a)(9)
of this subchapter apply to jerricans
intended for reuse.

(2) For aluminum jerricans the body
and heads must be constructed of alu-
mhimum at least 99% pure or of an alu-
mhimum base alloy. Material must be of
a type and of adequate thickness in re-
lation to the capacity of the jerrican
and to its intended use.

(3) Chimes of all jerricans must be
mechanically seamed or welded. Body
seams of jerricans intended to carry 40 L (11 gal-
rons) or less must be mechanically
seamed or welded.

(4) Openings in jerricans (3A1) may
not exceed 7.0 cm (3 inches) in diame-
ter. Jerricans with larger openings are
considered to be of the removable head
type. Closures must be so designed that
they remain secure and leakproof
under normal conditions of transport.
Gaskets or other sealing elements
must be used with closures, unless the
closure is inherently leakproof.

(5) If materials used for body, heads,
closures and fittings are not in them-
selves compatible with the contents to
be transported, suitable internal pro-
ective coatings or treatments must be
applied. These coatings or treatments
must retain their protective properties
under normal conditions of transport.

(6) Maximum capacity of jerrican: 60
L (16 gallons).

(7) Maximum net mass: 120 kg (265
pounds).

[Amdt. 178–97, 55 FR 52717, Dec. 21, 1990, as
amended by Amdt. 178–102, 59 FR 28494, June
2, 1994; Amdt. 178–119, 62 FR 24742, May 6,
1997]

§ 178.512 Standards for steel, alu-
mhimum or other metal boxes.

(a) The following are identification
codes for steel, aluminum, or other
metal boxes:
(1) 4A for a steel box;
(2) 4B for an aluminum box; and
(3) 4N for an other metal box.

(b) Construction requirements for
steel, aluminum or other metal boxes
are as follows:
(1) The strength of the metal and the
construction of the box must be appro-
priate to the capacity and intended use
of the box.

(2) Boxes must be lined with fiber-
board or felt packing pieces or must
have an inner liner or coating of suit-
able material in accordance with sub-
part C of part 173 of this subchapter. If
a double seamed metal liner is used,
steps must be taken to prevent the in-
gress of materials, particularly explo-
sives, into the recesses of the seams.

(3) Closures may be of any suitable
type, and must remain secure under
normal conditions of transport.