

this section may be used for its transportation. Each package must conform to the general packaging requirements of subpart B of part 173, to the requirements of part 178 of this subchapter at the Packing Group I or II performance level, and to the requirements of the special provisions of column 7 of the §172.101 table.

(b) The following combination packagings are authorized:

*Outer packagings:*

- Steel drum: 1A1 or 1A2
- Aluminum drum: 1B1 or 1B2
- Metal drum other than steel or aluminum: 1N1 or 1N2
- Plywood drum: 1D
- Fiber drum: 1G
- Plastic drum: 1H1 or 1H2
- Wooden barrel: 2C2
- Steel jerrican: 3A1 or 3A2
- Plastic jerrican: 3H1 or 3H2
- Aluminum jerrican: 3B1 or 3B2
- Steel box: 4A
- Aluminum box: 4B
- Natural wood box: 4C1 or 4C2
- Plywood box: 4D
- Reconstituted wood box: 4F
- Fiberboard box: 4G
- Solid plastic box: 4H2

*Inner packagings:*

- Glass or earthenware receptacles
- Plastic receptacles
- Metal receptacles
- Glass ampoules

(c) Except for transportation by passenger aircraft, the following single packagings are authorized:

- Steel drum: 1A1 or 1A2
- Aluminum drum: 1B1 or 1B2
- Plywood drum: 1D
- Plastic drum: 1H1 or 1H2
- Fiber drum: 1G
- Metal drum other than steel or aluminum: 1N1 or 1N2
- Wooden barrel: 2C1 or 2C2
- Steel jerrican: 3A1 or 3A2
- Plastic jerrican: 3H1 or 3H2
- Aluminum jerrican: 3B1 or 3B2
- Steel box: 4A
- Steel box with liner: 4A
- Aluminum box: 4B
- Aluminum box with liner: 4B
- Natural wood box: 4C1
- Natural wood box, sift proof: 4C2
- Plywood box: 4D
- Reconstituted wood box: 4F
- Fiberboard box: 4G
- Expanded plastic box: 4H1
- Solid plastic box: 4H2
- Bag, woven plastic: 5H1, 5H2 or 5H3
- Bag, plastic film: 5H4
- Bag, textile: 5L1, 5L2 or 5L3

- Bag, paper, multiwall, water resistant: 5M2
- Plastic receptacle in steel, aluminum, plywood, fiber or plastic drum: 6HA1, 6HB1, 6HD1, 6HG1 or 6HH1
- Plastic receptacle in steel aluminum, wood, plywood or fiberboard box: 6HA2, 6HB2, 6HC, 6HD2 or 6HG2
- Glass, porcelain or stoneware in steel, aluminum, plywood or fiber drum: 6PA1, 6PB1, 6PD1 or 6PG1
- Glass, porcelain or stoneware in steel, aluminum, wooden or fiberboard box: 6PA2, 6PB2, 6PC or 6PG2
- Glass, porcelain or stoneware in expanded or solid plastic packaging: 6PH1 or 6PH2

[Amdt. 173-224, 55 FR 52634, Dec. 21, 1990, as amended by Amdt. 173-241, 59 FR 67511, 67518, Dec. 29, 1994; Amdt. 173-261, 62 FR 24734, May 6, 1997]

**§ 173.213 Non-bulk packagings for solid hazardous materials in Packing Group III.**

(a) When §172.101 of this subchapter specifies that a solid hazardous material be packaged under this section, only non-bulk packagings prescribed in this section may be used for its transportation. Each package must conform to the general packaging requirements of subpart B of part 173, to the requirements of part 178 of this subchapter at the Packing Group I, II or III performance level, and to the requirements of the special provisions of column 7 of the §172.101 table.

(b) The following combination packagings are authorized:

*Outer packagings:*

- Steel drum: 1A1 or 1A2
- Aluminum drum: 1B1 or 1B2
- Metal drum other than steel or aluminum: 1N1 or 1N2
- Plywood drum: 1D
- Fiber drum: 1G
- Plastic drum: 1H1 or 1H2
- Wooden barrel: 2C2
- Steel jerrican: 3A1 or 3A2
- Plastic jerrican: 3H1 or 3H2
- Aluminum jerrican: 3B1 or 3B2
- Steel box: 4A
- Aluminum box: 4B
- Natural wood box: 4C1 or 4C2
- Plywood box: 4D
- Reconstituted wood box: 4F
- Fiberboard box: 4G
- Solid plastic box: 4H2

*Inner packagings:*

- Glass or earthenware receptacles
- Plastic receptacles
- Metal receptacles
- Glass ampoules

**§ 173.214**

(c) The following single packagings are authorized:

- Steel drum: 1A1 or 1A2
  - Aluminum drum: 1B1 or 1B2
  - Plywood drum: 1D
  - Fiber drum: 1G
  - Plastic drum: 1H1 or 1H2
  - Metal drum other than steel or aluminum: 1N1 or 1N2
  - Wooden barrel: 2C1 or 2C2
  - Steel jerrican: 3A1 or 3A2
  - Plastic jerrican: 3H1 or 3H2
  - Aluminum jerrican: 3B1 or 3B2
  - Steel box with liner: 4A
  - Steel box: 4A
  - Aluminum box with liner: 4B
  - Natural wood box: 4C1
  - Natural wood box, sift proof: 4C2
  - Plywood box: 4D
  - Reconstituted wood box: 4F
  - Fiberboard box: 4G
  - Expanded plastic box: 4H1
  - Solid plastic box: 4H2
  - Bag, woven plastic: 5H1, 5H2 or 5H3
  - Bag, plastic film: 5H4
  - Bag, textile: 5L1, 5L2 or 5L3
  - Bag, paper, multiwall, water resistant: 5M2
  - Plastic receptacle in steel, aluminum, plywood, fiber or plastic drum: 6HA1, 6HB1, 6HD1, 6HG1 or 6HH1
  - Plastic receptacle in steel, aluminum, wooden, plywood or fiberboard box: 6HA2, 6HB2, 6HC, 6HD2 or 6HG2
  - Glass, porcelain or stoneware in steel, aluminum, plywood or fiber drum: 6PA1, 6PB1, 6PD1 or 6PG1
  - Glass, porcelain or stoneware in steel, aluminum, wooden or fiberboard box: 6PA2, 6PB2, 6PC or 6PG2
  - Glass, porcelain or stoneware in expanded or solid plastic packaging: 6PH1 or 6PH2
- [Amdt. 173-224, 55 FR 52643, Dec. 21, 1990, as amended by Amdt. 173-241, 59 FR 67511, 67518, Dec. 29, 1994; Amdt. 173-261, 62 FR 24734, May 6, 1997]

**§ 173.214 Packagings which require approval by the Associate Administrator.**

When §172.101 of this subchapter specifies that a hazardous material be packaged under this section, packagings and method of shipment must be approved by the Associate Administrator prior to the first shipment.

[Amdt. 173-224, 55 FR 52643, Dec. 21, 1990, as amended at 66 FR 45379, Aug. 28, 2001]

**§ 173.216 Asbestos, blue, brown or white.**

(a) Asbestos, blue, brown or white, includes each of the following hydrated mineral silicates: chrysolite, crocid-

**49 CFR Ch. I (10-1-02 Edition)**

olite, amosite, anthophyllite asbestos, tremolite asbestos, actinolite asbestos, and every product containing any of these materials.

(b) Asbestos which is immersed or fixed in a natural or artificial binder material (such as cement, plastic, asphalt, resins or mineral ore), and manufactured products containing asbestos are not subject to the requirements of this subchapter.

(c) Packagings for asbestos must conform to the general packaging requirements of subpart B of this part but need not conform to the requirements of part 178 of this subchapter. Asbestos must be offered for transportation and transported in—

(1) Rigid, leaktight packagings, such as metal, plastic or fiber drums, portable tanks, hopper-type rail cars, or hopper-type motor vehicles;

(2) Bags or other non-rigid packagings in closed freight containers, motor vehicles, or rail cars that are loaded by and for the exclusive use of the consignor and unloaded by the consignee;

(3) Bags or other non-rigid packagings which are dust and sift-proof. When transported by other than private carrier by highway, such packagings containing asbestos must be palletized and unitized by methods such as shrink-wrapping in plastic film or wrapping in fiberboard secured by strapping. Pallets need not be used during transportation by vessel for loads with slings that are unitized by methods such as shrink-wrapping, if the slings adequately and evenly support the loads and the unitizing method prevents shifting of the bags or other non-rigid packagings during conditions normally incident to transportation; or

(4) Bags or other non-rigid packagings which are dust and sift-proof in strong outside fiberboard or wooden boxes.

[Amdt. 173-224, 55 FR 52643, Dec. 21, 1990, as amended by 66 FR 45379, Aug. 28, 2001]

**§ 173.217 Carbon dioxide, solid (dry ice).**

(a) Carbon dioxide, solid (dry ice), when offered for transportation or transported by aircraft or water, must be packed in packagings designed and constructed to permit the release of