

DEPARTMENT OF TRANSPORTATION
HAZARDOUS MATERIALS
PACKAGING SPECIFICATIONS

§ 173.257 Electrolyte (acid) and alkaline corrosive battery fluid.
(a) Electrolyte (acid) may not be over 47 percent strength (39° Baume). Electrolyte or alkaline corrosive battery fluid must be packaged as follows (packaging utilizing a bag to contain the electrolyte or battery fluid is not authorized for transportation by air):

(6) Spec. 12B or 12C (§§ 178.205 or 178.206 of this subchapter). Fiberboard boxes with inside containers of polyethylene or other electrolyte acid resistant nonfragile materials having secure closures capable of withstanding conditions incident to transportation without leakage and unless containers are rigid or semi-rigid in nature they must be contained in other strong inside containers; minimum thickness of polyethylene or other materials shall be not less than 0.003 inch for any film sheet for multiwall containers or not less than 0.006 inch for single-wall containers; not more than 12 such inside containers shall be packed in one outside box and the marking prescribed in § 173.401(c) shall not be required. Inside containers shall be packed to prevent movement within the box (see §§ 178.205-34 and 178.206-19 of this subchapter). Dry storage batteries or battery charger device may be packed in the same outside box when adequately separated from other inside containers (see § 178.205-33 of this subchapter); gross weight of completed package shall not exceed 65 pounds, except when acid is packed in individual inside containers the gross weight shall be not over 75 pounds. Complete package, closed as for shipment, with inside containers filled with liquid of same specific gravity as commodity to be shipped, must be capable of withstanding at least 2 drops from a height of 4 feet onto solid concrete without leakage from or rupture of inside containers.

(14) Spec. 12B (§ 178.205 of this subchapter). Corrugated fiberboard boxes with plastic bags as defined in § 178.205-37 of this subchapter. Marking prescribed in § 172.312(a) shall not be required.

§ 178.205-37 Special box; authorized polyethylene or other suitable plastic bags for packaging of electrolyte (acid) or alkaline corrosive battery fluid only. (a) Box must comply with this specification except as follows: Box must be one-piece construction of slotted style and may have die-cut areas of minimum size to provide access to an inside closure part. Box must contain one multiwall bag made of polyethylene or other suitable plastic of sufficient size and capacity to be capable of coming into contact with all of the interior surfaces of the box when filled. Each ply of the bag must be formed from virgin film not less than 0.003 inch thick. Joints must be heat sealed and not less than 1/8-inch wide.

(b) Boxes must be center special slotted style, or regular slotted style. If any metal is used in the box construction, full liners and top and bottom pads are required. Any metal closure for a discharge tube must be installed so as to prevent contact with the polyethylene bag. Discharge tubes must be plugged or heat sealed. Maximum volumetric capacity must not exceed 5 gallons (nominal).

(1) For boxes having capacities of 6 quarts (nominal) or less, fiberboard of at least 200-pound test is required for construction.