



Ball Corporation

10 Longs Peak Drive, Broomfield, CO (303) 469-5511 Fax (303) 460-5149
Reply to: P.O. Box 5000, Broomfield, CO 80038-5000

CLOSING INSTRUCTIONS FOR U.N. CERTIFIED GALLON OBLONG CANS

(Also applies to standard/non-certified oblong containers)

In CFR 49 Section 178.2 the DOT requires that the manufacturer of U.N. marked packaging "notify in writing ... of the type and dimensions of any closures, including gaskets, needed to satisfy the performance test requirements."

In the spirit of that regulation, Ball Aerosol & Specialty Packaging offers the following instructions regarding the closing and assembly of its U.N. certified gallon oblong packagings.

Jerricans

In the case of metal screw caps, ensure that the proper cap and liner has been selected for the style of screw nozzle. Apply the cap without distortion to either the cap or fitment. Current UN certified metal closure options for the Jerrican include; **1-1/4" Alpha, 1-3/4" Alpha and 1-3/4" Delta**. The recommended minimum application torque for screwcaps on UN certified and standard gallon oblongs is **25 in-lbs for 1-1/8" Beta** caps and **40 in-lbs for the 1-1/4" Alpha, 1-3/4" Alpha and 1-3/4" Delta** caps. Refer to the corresponding container certification documents for details regarding the required cap liners.

Rieke plastic fitments must have a membrane seal and should be inserted into the opening so that they are fully seated, but without causing distortion to the top end of the can. It is recommended that the plastic fitment be warmed to a temperature of 120°F to reduce insertion forces.

Combination Packages

The test reports describe the shipper cartons and sealing methods which are required for these packages. In basic terms, four cans per box (single-wall corrugated) with a single-wall 4-cell partition. The cans should be closed as described for Jerricans. Containers with plastic fitments should be placed so that all fitments are oriented to the center of the carton. The boxes can be closed with glue or pressure sensitive tape. Current metal closure options for combination packages include; **1-1/8" Beta, 1-1/4" Alpha, 1-3/4" Alpha and 1-3/4" Delta**. With respect to plastic fitments, options are restricted to Rieke's **32 mm REL plastic fitment** with a membrane seal. Refer to the respective package certification for full details.