

IBC CLOSURE NOTIFICATION

Country: USA

DOT Regulations in 49 CFR 178.2 (c)(1) require that Greif Packaging LLC provides a closure notification statement on 31HA1 composite IBCs, including inner receptacles and service equipment. For non-UN inner receptacles, the following closure notification also applies.

CLOSURE NOTIFICATION STATEMENT

- Top openings in Greif UN IBC's must be fitted with 6" or 9" caps and gaskets supplied by Greif, Inc.
- 6" threaded top closures are to be torqued to the following based on the gasket:
 - EPDM gaskets = 65 ft-lbs
 - SBR and Santoprene gaskets = 45 ft-lbs
 - Viton gaskets = 75 ft-lbs
- 9" threaded top closures must be torqued to 85 ft-lbs
- Plugs in both cap sizes must be torqued to the following:
 - 2" NPT and Buttress plugs = 20 ft-lbs
 - \circ 3/4" plugs inside 2" plugs = 9 ft-lbs
 - \circ 3/4" manual vent plugs from Stainlez = 2 ft-lbs.
- Representative service equipment in the form of a bottom Greif Italy plastic collar valve must be tightened to a torque of 40 ft-lbs minimum. All other plastic collar valves and metal collar valves must be tightened to a torque of 50 ft-lbs minimum.
 - For valve installation, the starting orientation of the valve handle should approximately be at the 11 o'clock position.
 - Once the valve is in position, hand tighten the collar until gasket contact occurs. Confirm the valve is approximately at the 11 o'clock position before proceeding with the required torque application.
 - The required torque should be obtained when the handle is prior to or at the 12 o'clock position.
 - If torque is reached prior to the handle being at the 12 o'clock position, the valve handle must be adjusted clockwise to the 12 o'clock position; additional torque may be applied to level valves that do not reach the 12 o'clock position with the required torque application.
 - Should the valve orientation pass the 12 o'clock position prior to reaching required torque, loosen valve and reposition prior to re-starting the installation process.
- 2" weld on valves have no closing torque required.

NOTE: The filler is responsible for verifying closing torque on all closures and valves that are preinstalled. Greif completes testing to the minimum of the stated ranges for all closures where applicable.

Rigid Industrial Packaging & Services 366 Greif Parkway – Delaware, Ohio 43015 Corporate Office 425 Winter Road – Delaware, Ohio 43015 www.greif.com



LEAKPROOFNESS TESTING STATEMENT

Greif Packaging LLC manufactures composite IBCs that are compliant with all applicable regulatory requirements in 49 CFR for the design types marked as 31HA1. Greif applies a UN mark to every inner receptacle manufactured in its North America facilities that is compliant with DOT regulations, including 49 CFR 178.703.

Every inner receptacle manufactured by Greif in North America is visually inspected and leakproofness tested in compliance with 49 CFR 178.813. For inner receptacles sold with representative service equipment preinstalled, i.e. bottom discharge valve, every unit is visually inspected and leak-tested with the valve in place, and the leakproofness testing date, as performed by Greif on its inner receptacles.

The remanufacturer or service provider who installs Greif inner receptacles in structural equipment is responsible for the full UN mark, in accordance with the test report, on rebottled or remanufactured units.

Rigid Industrial Packaging & Services

366 Greif Parkway – Delaware, Ohio 43015

Corporate Office

425 Winter Road – Delaware, Ohio 43015 www.greif.com