

SII Plastic IBC Leakproofness Test Procedure

Leakproofness Test

- Reference Title 49 §178.813
 - *Subchapter C – Hazardous Material Regulations*
 - *Specifications for Packagings*
 - *Subpart O – Testing of IBCs*
 - *Leakproofness Test*

- Tools and Materials Need:
 - Spray Bottle
 - Sponge
 - Bucket of clean water
 - Liquid Soap
 - Apparatus to apply pressure to the container through the valve containing the following:
 - Air supply connection with valve
 - Pressure Relief device set
 - minimum of 20 kPa (2.9 psi)
 - maximum of 24 kPa (3.5 psi).
 - Air hose
 - Air supply

Leakproofness Test

- Visually inspect the unit.

- Ensure all closures are properly sealed.
 - Vented closures must be replaced by similar non-vented closures or sealed.
 - Follow SII IBC Closure Notification.

- Pressurize the container.
 - Minimum 20 kPa (2.9 psi)
 - Maximum 24 kPa (3.5 psi)

- Condition the container to the pressure for 1 minute prior to beginning the test.

- Liberally apply soapy water (1 cup liquid soap to 1 gallon of water) to the following areas:
 - Mold Seams/Flange Lines
 - Molded-in lettering
 - Molded-in inserts
 - Replaceable bungs
 - Sharp corners
 - Any tank opening (threaded or non-threaded)

- Check these areas for leaks.
 - Bubbles will form a leak locations

Leakproofness Test

- Test the valve
 - Position the container with the valve outlet pointing up.
 - Close the valve while the container is pressurized.
 - Remove dust cap and fill the valve outlet with soapy water.
 - Ensure the ball is completely submerged.
 - Check for leaks past the ball.
 - Liberally apply soapy water to the following areas:
 - Valve container connection
 - Valve body
 - Handle.
 - Open the valve to blow out the soapy water and wipe the valve outlet clean.
 - Test the dust cap.
 - Pressurized the tank
 - Replace the dust cap
 - Open valve
 - Apply soapy water
 - Check for leaks