

Irrigation FAQ

TITAN XL® and PIC™ Irrigation Containers

What are the overfill volume specifications for TITAN XL and PIC Irrigation Containers?

The United States Pharmacopeia (USP) requires for large volume containers to be filled with a slight excess volume to ensure the labeled amount can be withdrawn. For containers of 50 mL or greater, the recommended excess volume is 2% (USP <1151>). Variations in the amount of solution dispensed by the filling equipment ensure the overfill for TITAN XL and PIC Irrigation Containers includes this 2% allowance, guaranteeing at least the labeled volume plus overfill and accounting for potential vapor transmission losses over the shelf life of the product.¹

Can TITAN XL Irrigation Containers be used with power irrigators or pressure cuffs?

TITAN XL Irrigation Containers have an 'O' ring in the set port for better retention and compatibility with power irrigators. They are not suitable for use with external pressurization devices like pressure cuffs. B. Braun has qualified the TITAN XL Container Closure System only for FDA-approved applications. Practitioners must independently determine the suitability and safety of the combined irrigation system. For best performance, use compatible B. Braun sets.

How long and at what temperature can TITAN XL Irrigation Containers be placed in a warmer?

The labeling for TITAN XL Irrigation Containers advises minimizing exposure to heat and avoiding excessive heat. Store at room temperature (77°F/25°C); brief exposure to 104°F (40°C) does not adversely affect the product. B. Braun's testing at 77°F (25°C) with the overwrap intact showed stability throughout the shelf life. Functional integrity testing after 14 days at 104°F (40°C) showed no impact. Products exposed to 104°F (40°C) and not used within 14 days must be discarded.²

How long can the TITAN XL Irrigation Container be stored without its overwrap?

TITAN XL 2000 mL and 3000 mL Containers can be stored at 77°F (25°C) for seven (7) days without plastic overwrap or until their expiration date—whichever is sooner—based on B. Braun testing. Follow your facility's protocol for proper storage.³

Can I stack TITAN XL Irrigation Containers?

Handle TITAN XL Containers with care due to their size and weight. In storage, minimize stacking and do not stack more than five (5) units for up to seven (7) days.⁴

What are the dimensions of the PIC Irrigation Container?

The dimensions of the PIC Containers are as follows:⁵

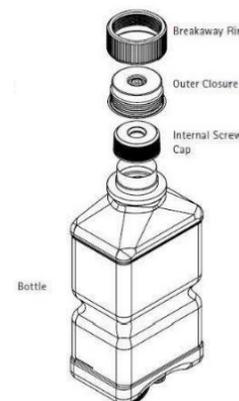
Volume	Length	Width	Height
500 mL	4.09 in.	2.81 in.	5.4 in.
1,000 mL			8.61 in.

The PIC™ Bottle is discolored. Should I be concerned?

The discoloration is isolated to only the container and may vary by lot due to the product's age. B. Braun's testing shows the container discoloration does not impact the solution or compromise its quality or integrity.⁶

What components make up the PIC Irrigation Container Closure System?

The PIC Irrigation Container consists of three parts: (1) breakaway ring, (2) outer closure with a tamper-evident seal and (3) internal screw cap. The internal screw cap can be removed after the outer closure is taken off, which can only be removed using the breakaway ring. Breakaway rings are interchangeable for all PIC unit sizes.



How do I open and hang the PIC Irrigation Container?

To remove the tamper-evident outer closure of the PIC Irrigation Container, turn the breakaway ring counterclockwise until you feel resistance. Continue twisting until the outer closure breaks free with a cracking noise indicating the tamper-evident seal is broken.

To hang the PIC Container after spiking, invert the bottle and flip the hangar tab upward. Holding the bottle with one hand and the hanger tab with the other, hang on an IV pole. To use for pourable irrigation, remove the internal screw cap and pour. PIC Containers feature a no-drip lip to minimize fluid and environmental contamination during pouring.

Only the breakaway ring came off the PIC Irrigation Container. Now what do I do?

If, after twisting, you are left holding an open ring, you have turned it in the wrong direction. Rethread the breakaway ring by twisting it onto the outer closure in a counterclockwise direction. If the breakaway ring is at the bottom of the case or not present on the bottle, you will see the threads of the outer closure. Rethread the breakaway ring onto the bottle following the steps listed above.

What should I do if the PIC Irrigation Container Breakaway Ring is broken, or I cannot remove the breakaway ring and outer closure?

Return the container if the breakaway ring is broken. If the ring is difficult to turn, use a B. Braun PIC Wrench for leverage, especially if the cap is slippery, your gloves hinder your grip or the lid is tightly fastened. If you do not have a PIC wrench, please contact your B. Braun sales representative to acquire one at no charge or set the unit aside and use an alternate container. Please notify B. Braun if either of these issues occur.

How long and at what temperature can PIC Irrigation Containers be placed in a warmer?

The PIC Irrigation Container Package Insert states: "Exposure of pharmaceutical products to heat should be minimized. Avoid excessive heat. Protect from freezing. It is recommended that the product be stored at room temperature (77°F/25°C); however, brief exposure up to 104°F (40°C) does not adversely affect the product." Furthermore, the package insert also states: "Do not warm above 150°F (66°C)."

Based on stability testing conducted at B. Braun, "brief exposure" can be defined as up to one month (4 weeks) of storage at 104°F (40°C). The product integrity can be maintained when warmed at controlled temperatures up to 150°F (66°C) for a maximum of 72 hours. Warning cabinets should be set to a controlled temperature not exceeding 150°F (66°C) to ensure minimal bottle distortion. Unused product must be discarded.⁷

1. United States Pharmacopeia < 1151>, 41-NF36 May 2018
2. Warming Recommendations for B. Braun Irrigation Solutions in 2L/3L Plastic Container, Report # PH SD 1004987
3. TITAN XL Water Vapor Transmission Rate Regression Analysis Report, Report # RPT-PH-1007268
4. Summary Report Lab Notebook Study on Stacking of 3L TITAN Containers, Report # RPT-PH-1007457
5. PIC drawings from Clinical Et Technical Support Product Information Database
6. Extractables/Leachables Study Report for the Plastic Irrigation Container (PIC) Closure System, Report # RPT-PH-1006019
7. Stability Study of Various Irrigation Solutions in the PIC Container at 150°F (66°C) for 72 Hours, Report #RPT-1004378

B. Braun Medical Inc.

Bethlehem, PA | 800-227-2862 | bbraunusa.com

Rx only. Confidential and Proprietary. ©2025 B. Braun Medical Inc. All rights reserved. 25-0360_09/25