

Bubble Point Test Method

1. The membrane disc was thoroughly wetted with ultra pure water.
2. Thorough wetting was ensured by filtration of 5mL of water at ambient temperature.
3. The system was immediately connected to the Integritytest instrument and the bubble point program initiated.
4. The bubble point measurement was repeated after membrane rewetting with an additional 5mL of water.
5. The membrane disc was dried thoroughly for a minimum of 16 hours.
6. The membrane disc was reinstalled in the holder.
7. The membrane wetting was ensured by filtering 5mL of the (1:128 (v/v)) test product.
8. The system was immediately connected to the Integritytest instrument and the bubble point program initiated.
9. The bubble point measurement was repeated after membrane rewetting with 5mL of fresh (1:128) test product.
10. The bubble point measurement was repeated until a stable result was found (< 1.0 psi variation between 3 consecutive bubble point readings).

$$\text{BPR} = \frac{\text{Product Bubble Point}}{\text{Water Bubble Point}}$$