

Overview of PureSure® Technology used in PURELAB® Chorus 1

The PureSure® concept

In all deionization processes there is a risk that weakly ionized impurities will elute from the resins and into your application, as they approach exhaustion.

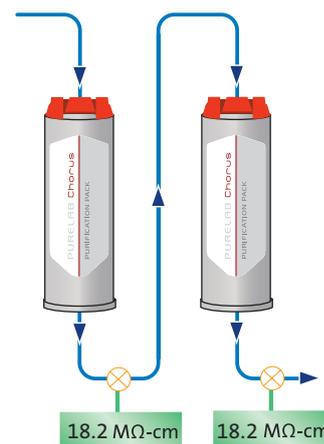
Ion exchange resins contain positive and negative functional groups in the hydrogen and hydroxide forms. These ions are exchanged for inorganic impurities as the water flows across them. Impurities with a strong charge (such as calcium) are first to exchange. As these strongly charged impurities 'fill up' the space on the resin, so weakly charged impurities can 'slip' off. As the resin approaches exhaustion, weak anions such as CO₂, organics and silica can elute at relatively high levels into the purified water without standard resistivity monitors detecting them. PureSure prevents this.

Conventional Ultra Pure System



Conventional systems rely on a final resistivity monitor to alert the user to any impurities in the water.

PureSure System



At ELGA LabWater we fit an extra sensor between two stages. This ensures that the second purification pack can be changed before weakly charged impurities leak into your application. The first purification pack is removed, the second pack moved into the first position and a new purification pack is fitted into the second position.

Benefits of the PureSure system

Guaranteed Purity

Because the PureSure System monitors purity changes (interstage monitoring) on our PURELAB Chorus, we can guarantee your water purity at all times, even when your purification packs approach the end of their life.

Early warning of purification pack change

Since the system warns you of changes in resistivity and not

just final water purity, you can choose to continue working with the pack installed until a replacement pack is purchased.

Cost savings

The PureSure System extends the life of your purification packs by over 80% resulting in greater utilization of resin capacity. We do this by re-using the final stage pack as a primary stage pack. This not only saves you money but reduces the number of packs used.

ELGA LabWater

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