

Osmotic Shock

Ion exchange resins encounter osmotic shock when they are exposed to a concentrated solution after being in a dilute solution and vice versa. These occurrences result in repeated shrinking and swelling of the bead.

The more porous a gel ion exchange resin is, the softer and more elastic it is. This makes it more suitable for resistance to osmosis shock. The harder a resin is the less elastic it is and the more prone it will be to osmotic damage.

In general, smaller resin beads are less susceptible to breakage as caused by osmotic shock than are larger beads.

