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Product Information

Polyacrylate-polyalcohol

Product Number **P 7588**

Store at Room Temperature

Product Description

Appearance: White beads, size range 100-850 μm

Bulk density: 650 g/L

Synonym: Dialyzorb[®]

Polyacrylate-polyalcohol is a high molecular weight polymer which is insoluble in water. It expands as it absorbs water and may pick up to 300 times its weight in water. However, high salt content in the dialysis buffer will reduce this value to about 50 times its weight. Typically, Dialyzorb is used in large excess, so this salt effect is not generally a limiting factor.

Because of its high molecular weight, the polymer is safe to use with dialysis tubing of any molecular weight cut-off without fear of its passing through the pores of the dialysis membrane and contaminating the sample solution. The swollen polymer rinses off easily, unlike some adsorbants which may partially dissolve and form viscous films on membrane surfaces. Dialyzorb is designed to concentrate any molecule that has a molecular weight larger than the molecular weight cut-off (MWCO) of the dialysis tubing or membrane being used. It can be used with as little as 100 μL of solution.

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Procedure

For General Use:

1. Place the solution or suspension into dialysis tubing. Put the tubing in a container of Dialyzorb. The beads will cause the solute to exit the pores of the tubing, trapping it, and thereby concentrating the solution or suspension retained within the tubing
2. The length of time needed will depend on the degree of concentration, the MWCO of the tubing, and the surface-to-volume ratio of the tubing. For example, 50% volume reduction was observed in four hours using dialysis tubing with 1-inch dry diameter and 12,000 MWCO.
3. Rinse the excess Dialyzorb from the outside of the tubing and retrieve the now-concentrated solution or suspension

For microconcentration:

1. Remove the indented section from the cap of a microcentrifuge tube, leaving just the rim. Cut one thickness of dialysis tubing into a piece about 1 inch square.
2. Pipette the solution or suspension into the microcentrifuge tube.
3. Sandwich the dialysis membrane between the cap and the tube, secure in place by snapping the cap closed.
4. Turn the tube upside down into a small amount of Dialyzorb.

5. Leave in place until the volume inside the tube is reduced the desired amount. Check frequently, since the Dialysorb can remove all the liquid from the tube.
6. Rinse the excess absorbent from the outside of the tube and centrifuge to collect the concentrated solution in the bottom of the tube.

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