INSTRUCTIONS

Dialysis Cells

Catalog Number: H40260-0000, H40261-0000, H40262-0000



GENERAL ASSEMBLY:

- 1. Place dialysis cell on flat surface with wing nuts facing up.
- 2. Remove all wing nuts.
- **3**. Remove upper cell half. While upper half is not in use, store on soft material to prevent scratching or marring of surfaces.
- **4**. Cover entire lower cell half with membrane. Cut corners for screw clearance.
- 5. Replace upper cell half using s.s. screws as guide posts. Be careful membrane does not slip and expose any portion of cavities on upper or lower cell halves.
- **6.** Apply finger pressure to top surface of upper cell half and thread on wing nuts (do not tighten firmly).
- 7. Visually inspect the complete cell assembly to insure membrane coverage of cavity halves.
- 8. Tighten wing nuts uniformly to prevent any leakage from cavities during operation of cell.

SUGGESTIONS

A syringe and needle can be used to fill cavity spaces. Thoroughly wash, rinse and dry dialysis cells after use and store in smooth, soft wrappings.





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Complete Line of Dialysis Cells

Volume shown is for one half cell.

Equilibrium Type Dialysis Cells

1ml
5ml
10ml

1.0ml

In-line Equilibrium Cell

Catalog Number H40317-0000

Dialysis Membranes

Catalog Number H40299-0000

Microdialysis Cell EQUILIBRIUM TYPE Catalog Number H40311-0000

cell volume 0.1ml

Dialysis Membrane Discs for Microdialysis Cells Catalog Number H40312-0000

Dialysis Membrane

Catalog Number: H40299-0000



The dialysis membrane is a regenerated cellulose sheet, prepared by the viscose process from cotton linters, one of the purest naturally occurring cellulose sources. Dialysis membranes contain water, glycerol as a humectant, and small quantities of sulfur compounds, primarily as polysulfides (approximately 0.1%). The sulfides normally need not be considered unless spectral measurements of retentate or dialysate are required. Both glycerol and sulfides may be removed by proper washing. The dialysis membranes must be kept in a closed container to conserve moisture. The membrane will lose some of its flexibility and possibly develop pinholes during handling if allowed to

lose moisture to the air. It is recommended that unused membranes be kept in an air-tight moisture-proof container, and stored in a cool location. The dialysis membrane can be used for laboratory dialysis and ultra-filtration. Normal molecular weight cutoff is generally 6,000. However, molecular weight is not the only factor in molecular transfer. The shape and size of the molecule is important. Various buffer solutions should be tried because the charge of the molecule can be altered by the pH of the medium. Also, tension on the membrane in one direction can reduce pore size, while tension in two directions will increase pore size. Once thoroughly wetted, the membrane should not be allowed to dry out as the subsequent shrinkage will decrease the pore size. Wetted membrane should be stored in water containing either acid or formaldehyde. Membrane thickness is .0029" (.073 mm).

