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Product Information

Dialysis Tubing, Benzoylated

Product Number **D 2272**

Storage Temperature 2-8 °C

Product Description

Dialysis tubing is a cellulose material used in the removal of salts and low molecular weight compounds during the purification of biomolecules. It is a thin polymeric membrane exhibiting maximum wet strength, compatibility with a wide variety of solvents, minimal polarity, and uniform pore size.

It is available unmodified or modified to reduce the pore size. The unmodified tubing is useful for separating compounds having molecular weight greater than 12,000 daltons. The modified dialysis tubing is benzoylated with benzoic anhydride, which introduces a benzoyl group to the tubing reducing the size of the pores. This tubing is useful for separating compounds with a molecular weight of $\leq 1,200$ daltons from compounds having a molecular weight over 2,000 daltons. The porosity of the tubing can also be adjusted by stretching, acetylation, or treatment with a strong solution of zinc chloride.¹

The tubing is sensitive to pH above 8 and should not be exposed to temperatures above 70 °C, since this may alter the pore size. Methanol will not damage the dialysis tubing and it may be used to store it. Tubing becomes brittle when allowed to dry.

Precautions and Disclaimer

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

Storage/Stability

The dialysis tubing may be stored in water at 4 °C. For long term storage, add 0.01% sodium azide.

Procedure

Procedures for preparing dialysis tubing for use have been reported.² The unmodified tubing can be prepared for use as follows:

1. Remove the glycerin by washing in running water for 3-4 hours.
2. Remove sulfur compounds by treating with a 0.3% (w/v) sodium sulfide solution at 70 °C for one minute, wash with hot water (60 °C) for two minutes, followed by acidification with 0.2% sulfuric acid, and rinse with hot water to remove the acid.

The modified tubing can be prepared by following step 2.

References

1. Craig, L. C., Techniques for the Study of Peptides and Proteins by Dialysis and Diffusion. *Methods Enzymol.*, **11**, 870-905 (1967).
2. Veillon, C., and Vallee, B. L., Atomic spectroscopy in metal analysis of enzymes and other biological material. *Methods Enzymol.*, **54(pt. E)**, 478-479 (1978).

AGW/RXR 10/03

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