

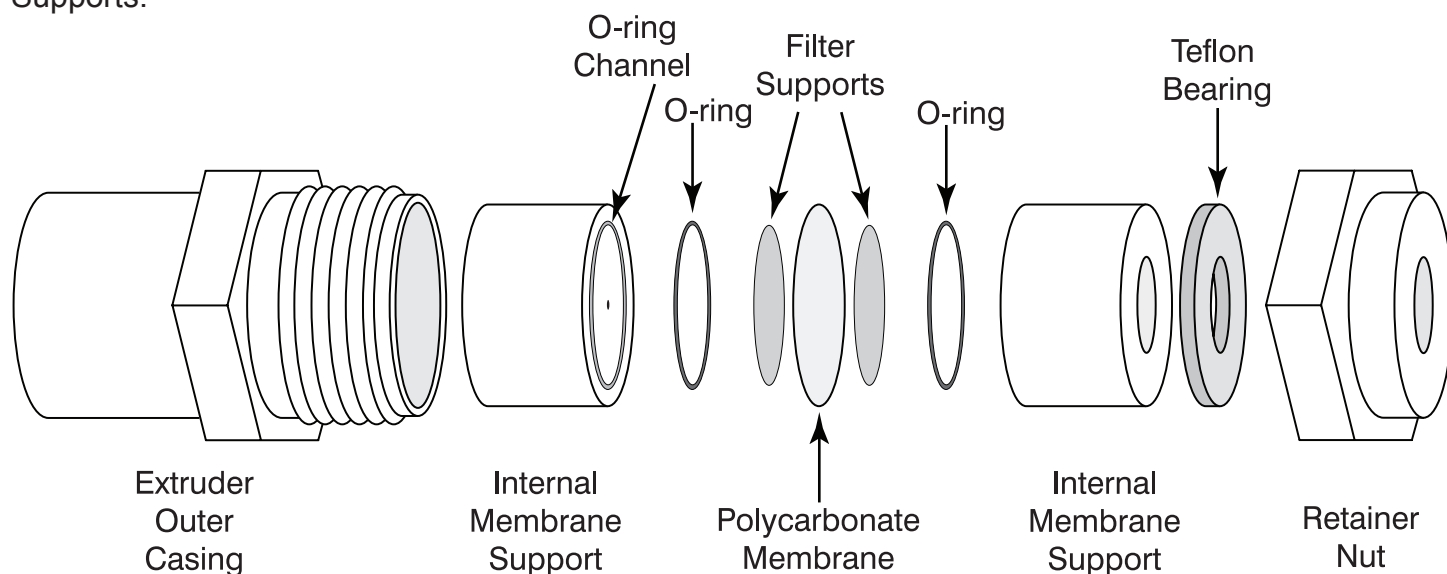
Avanti's Mini-Extruder

FOR LUV PREPARATION

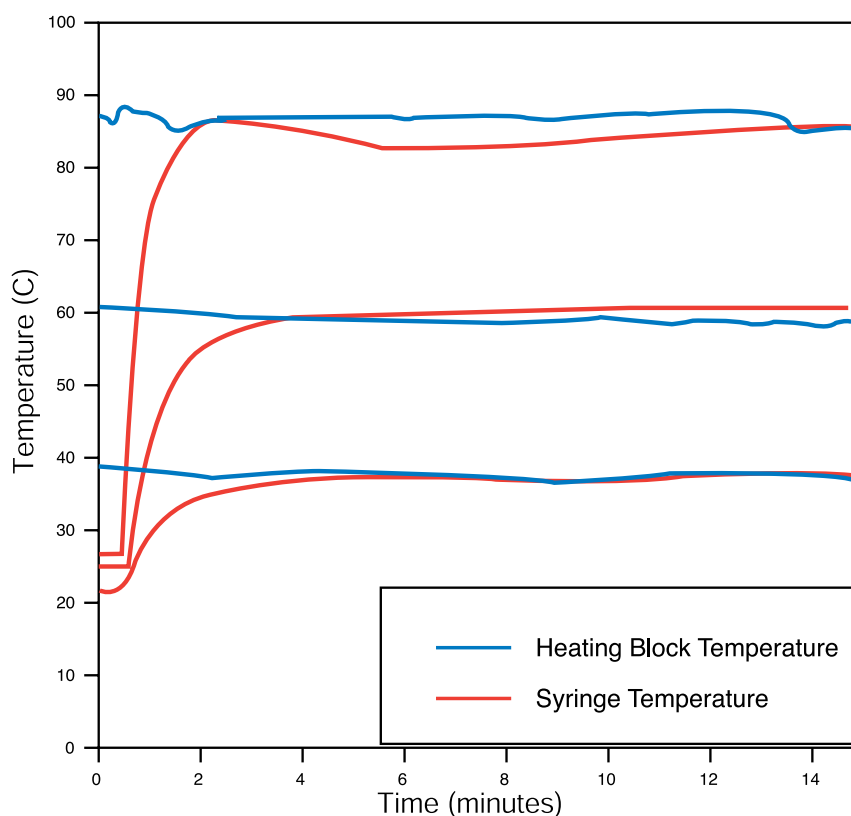
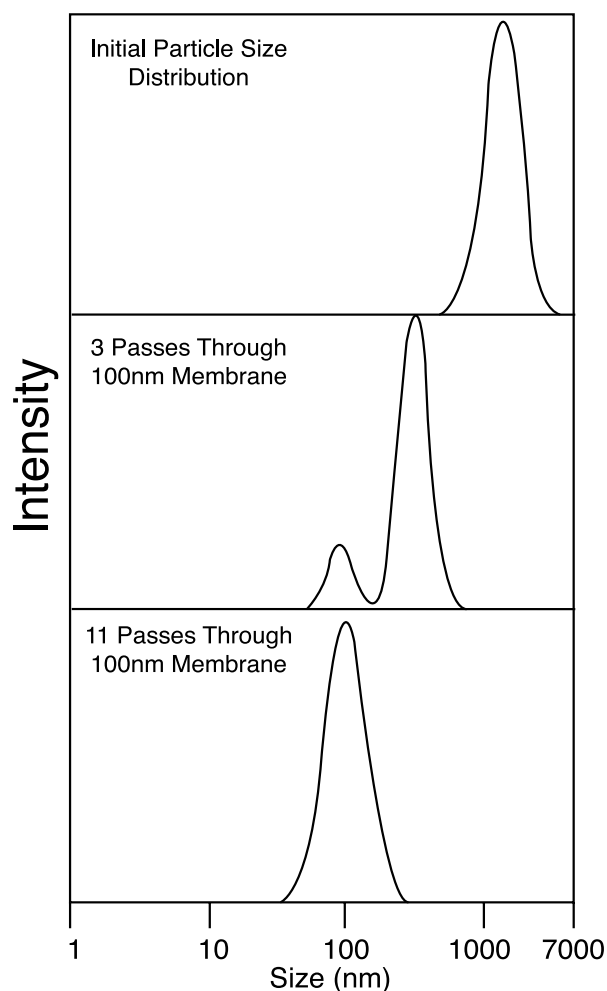


The Avanti Mini-Extruder allows researchers and scientists to prepare large, unilamellar vesicles by extrusion in an efficient, rapid manner. The optional heating block allows the extrusion of unilamellar vesicles at elevated temperatures, which is critical for the successful production of vesicles from phospholipids with a phase transition temperature (T_m) above room temperature. Constructed of stainless steel and Teflon, the new design eliminates the old-style metal washers that were prone to rust, thereby removing potential contamination problems. The design allows rapid cleaning of all wetted parts, which reduces the “down-time” between production of vesicles from different lipid species. The Mini-Extruder is available for a fraction of the cost of a larger extruder.

All parts for the Mini-Extruder are available from Avanti, and the set includes: Mini-Extruder, Extruder Stand/Stabilizer Block, 2 O-Rings, 2 Gas Tight Syringes, 100 Polycarbonate Membranes, and 100 Filter Supports.



Mini-Extruder



Placing the extruder assembly on a hot plate achieves rapid temperature control for lipids that have transition temperatures above room temperature.

The particle size distribution of unilamellar vesicles prepared by extrusion is a function of the number of passes through the Extruder Membrane. Hydrated lipid solutions will initially form large, multi-lamellar vesicles. After the initial pass through a membrane, the particle size distribution will tend towards a bimodal distribution. After sufficient passes through the membrane, a unimodal, normal distribution is obtained. A minimum of eleven passes through the Extruder membrane is recommended for most lipids. A solution of 1,2-Dioleoyl-sn-Glycero-3-Phosphocholine was made up to 25 mg/ml in DI water. The particle size distribution was measured for the material before extrusion and for 3 and 11 passes through a 100nm (0.1micron) membrane.

For tips on Preparing Large, Unilamellar Vesicles by Extrusion (LUVET), Assembly Instructions, & Care and Cleaning Instructions visit avantlipids.com

More than Lipids

BIOSCIENCES



+33 4 70 03 88 55



+33 4 70 03 73 06



interbiotech@interchim.com



211 bis Av. J.F. Kennedy | BP 1140
03103 Montluçon | France



www.interchim.com

