

Jacketed Liposome Extruder

Liposome | Lipopolyplex | Membrane Extrusion | Temperature Control | Gas-Driven Operation

Unique Benefits

The Genizer Jacketed Liposome Extruder is a gas-driven, temperature-controlled extrusion system designed for liposome and lipopolyplex processing. Samples are forced through track-etched membranes with defined pore sizes under controlled pressure and temperature. Typically, 5-10 passes are sufficient to improve particle size uniformity, depending on the formulation and membrane pore size.

- **Sanitary Construction:** 316L stainless steel construction with sanitary-grade materials.
- **Temperature Control:** Jacketed design enables controlled extrusion temperature.
- **Low Dead Volume:** Designed to minimize sample loss and facilitate cleaning and sterilization.



The Genizer Jacketed Liposome Extruder is designed to produce homogeneous liposome and lipopolyplex preparations by membrane extrusion. During extrusion, the sample is forced through track-etched membranes with defined pore sizes under controlled pressure and temperature. The process is relatively gentle and supports pressure settings up to 500 psi or 800 psi, depending on the model. The Jacketed Liposome Extruder features minimal dead volume, is easy to clean, and is suitable for sterilization. Its sanitary-grade construction is compliant with FDA and GMP sanitary standards.

Specifications

Catalog No.	GJE-10mL	GJE-100mL	GJE-800mL	GJE-3000mL	GJE-10000mL
Sample Size	10 mL	100 mL	800 mL	3,000 mL	10,000 mL
Cooling	Jacketed	Jacketed	Jacketed	Jacketed	Jacketed
Dimensions	13 × 23 × 25 cm	20 × 23 × 32 cm	18 × 22 × 35 cm	27 × 32 × 52 cm	43 × 52 × 70 cm
Weight	4 kg	7 kg	19 kg	45 kg	155 kg
Min. Sample Size	1 mL	5 mL	20 mL	60 mL	150 mL
Max. Pressure	500 psi	500 psi	800 psi	800 psi	800 psi
Max. Temperature	80 °C (176 °F)				
Power Type	Inert gas (e.g., nitrogen or argon) used with a 5–12 MPa gas cylinder and pressure regulator				
Cleaning	Disassemble, rinse, clean, and dry				
Sterilization	Whole unit autoclavable				



Phone: +1(949) 932-0294
Fax: +1(323) 978-4693
Email: Nano@Genizer.com
https://www.genizer.com/jacketed-liposome-extruder_p0005.html

Discount available for public research. Genizer.com reserves the right to change specifications without notice. © 2026 by Genizer. All rights reserved. English Version 260909.

Jacketed Liposome Extruder



Standard Features

Parts	Liposome Jacketed Extruder
Filter Plate	Model dependent
Drain Disc	Sold separately
Liposome Membrane	Sold separately
Nitrogen Tubing	Nitrogen high-pressure soft tubing with G 5/8"-14 TPI BSP inlet (1 m, 1.5 m)
Pressure Regulator Adapter	3/8 MNPT × 1/4 F Flare
Outlet Type	Luer Type
Product Material	316L stainless steel, NBR
Material Standard	Sanitary grade; compliant with FDA and GMP sanitary standards
Warranty	Standard 1-year warranty; optional 2-, 3-, 4-, or 5-year extended warranty

Optional Features

Detector	Pressure gauge for pressure regulator; pressure transducer; temperature transducer; safety relief valve
Liposome Membrane	φ25, φ47, φ90, φ142, φ293; pore sizes: 30, 50, 80, 200, 400, 800 nm; 1, 2, 5, 10 μm
Sintered Plate	φ90, φ142, φ293; pore sizes: 5, 10, 20 μm
O-Ring Material	VMQ; NBR; FKM; FFKM
Loading Tool	500 mL, 1 L feed cups; model dependent
CIP/SIP	Customizable (not compatible with drain disc)
Outlet Type	Customizable barbed type