

# LIPEX® Thermobarrel Extruder Packages

## PRODUCT DESCRIPTION

The LIPEX® Thermobarrel Extruders are the industry-standard bench-top extruders for initial development in both academia and industry. The units are designed to produce a homogenous population of large unilamellar vesicles from a non-homogenous population of multi-lamellar vesicles. The unilamellar vesicles are formed by utilizing a constant pressure force of between 100 and 800 psi to force the vesicles through filters of a predefined pore size. These units have a maximum operating pressure and temperature of 850 psi and 80 °C, respectively. The side wall of the thermobarrel is jacketed to provide temperature control of the extruder.

## PACKAGE CONTENTS

- (1x) LIPEX® Thermobarrel Extruder
- (1x) Package of polyester drain discs (100/pack)
- (1x) Package of polycarbonate filters with 100 nm pore size (100/pack)
- (1x) Spare O-ring set
- (1x) High pressure nitrogen line
- (1x) Turnover Package USB
  - Operating Manual
  - Declaration of Conformity
  - Certificate of Inspection & Testing

## TECHNICAL SPECIFICATIONS

LIPEX® Model	1.5 mL	10 mL	100 mL	800 mL
<b>MAOP*</b>				
• psig	850	850	850	850
• bar	58.6	58.6	58.6	58.6
<b>MAOT (°C)**</b>	80	80	80	80
<b>Min. Extrusion Volume</b>	0.9 mL	1 mL	20 mL	100 mL
<b>Max. Extrusion Volume</b>	1.5 mL	10 mL	100 mL	800 mL
<b>Weight (kg)</b>	3.0	2.9	12.3	18.9
<b>Material</b>				
• Body	316 L Stainless Steel			
• O-Ring	Buna			
<b>Surface Finish</b>	Mechanically Finished			



\* MAOP = Maximum Allowable Operating Pressure

\*\* MAOT = Maximum Allowable Operating Temperature

## REQUIRED ANCILLARY EQUIPMENT/SUPPLIES

The following is a general list of ancillary equipment/materials required for the operation of the extruder

- polyester drain disk
- polycarbonate filter
- heated re-circulator
- high pressure gas cylinder (nitrogen)
- gas regulator with a minimum delivery pressure of 1500 psi

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