

LIPOSOME PRODUCTION PACK

PRODUCT DESCRIPTION

P/N: O-MIX-LIPO-PCK

Version Apr. 24



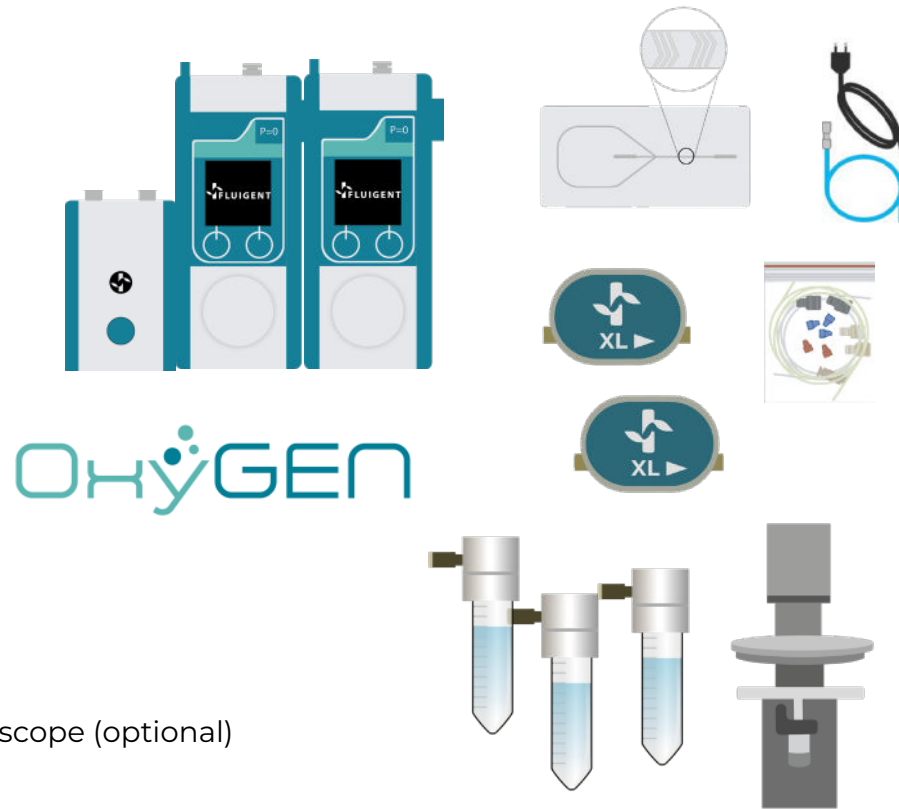
The Fluigent Liposome Production Package is a versatile, high-quality system to control the production of monodisperse liposome nanoparticles. It allows the user the flexibility to vary the size of the nanoparticles produced. The high performance of the system comes from the combination of Fluigent's LineUP microfluidic pumps and the Little Things Factory (GmbH)'s staggered herringbone mixer, a reusable glass microfluidic chip.

DESCRIPTION

The **Fluigent liposome production package** is capable of generating particle sizes over the range of 40-150 nm*.

CONTENTS

- 2 * Flow EZ™ (7000 mbar)
- 1 * Link
- 2 * FLOW UNIT (XL)
- 2 * P-CAP (2* 15 mL)
- 1 * P-CAP (50 mL)
- 1 * Herringbone mixer chip
- 1 * Lineup supply kit
- 1 * Flow Unit XL tubing kit
- 1 * High flow rate kit
- 2 * P-CAP 15 mL kit
- 1 * P-CAP 50 mL kit
- 1 * Liposome tubing kit
- OxyGEN Software
- 1 * Digital High-speed Opto Microscope (optional)



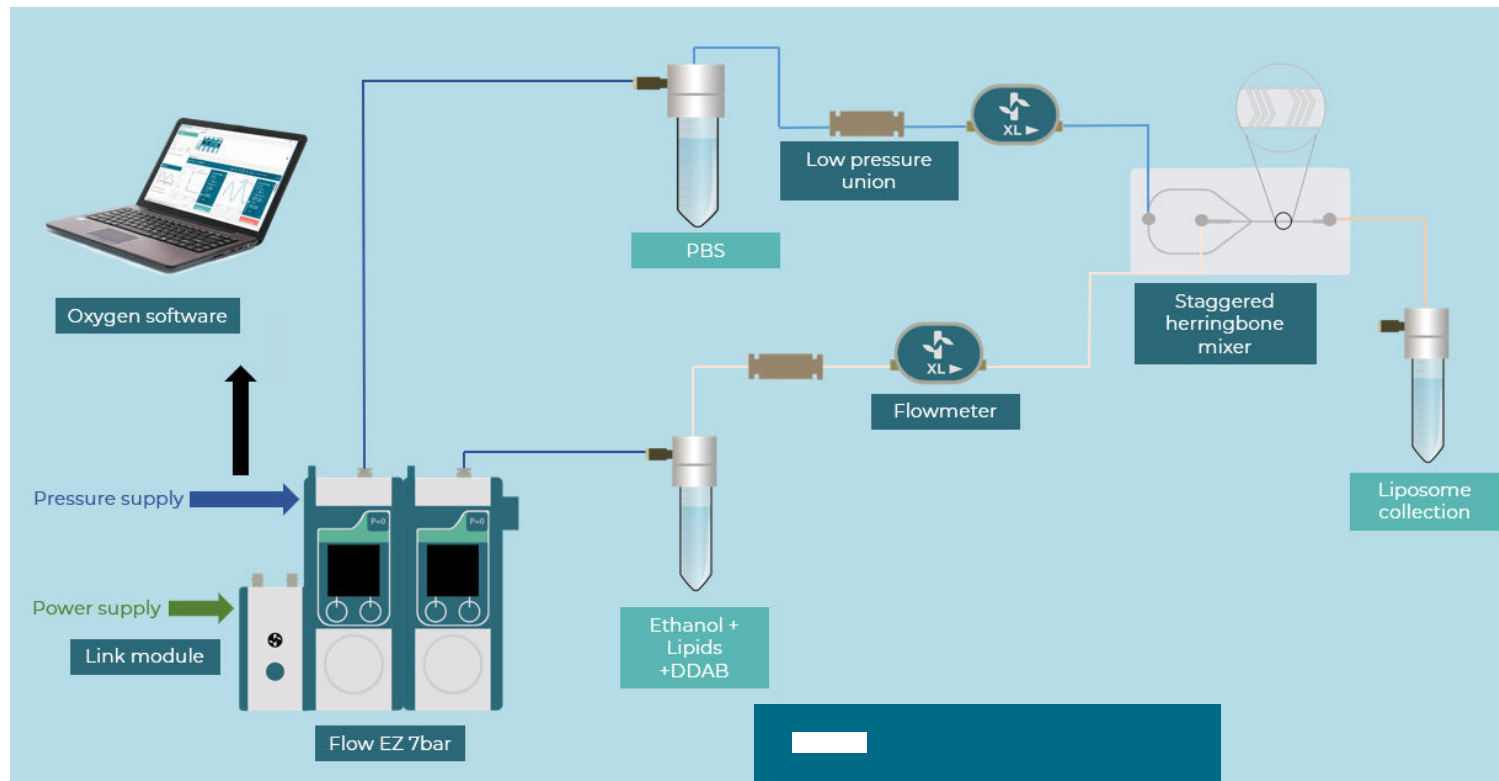
TECHNICAL SPECIFICATIONS

LIPOSOMES PRODUCTION	
Lipid phase	Lipids in organic solvent (depending on the application). In the User Guide, absolute ethanol, lipids (40 mg/mL), and Dimethyldioctadecylammonium (DDAB -10 mg/mL) were used.
Aqueous phase	Phosphate-buffered saline (PBS) (pH 7.2)
Particle size range*	40 nm to 150 nm
Polydispersity*	From 10% to 20%

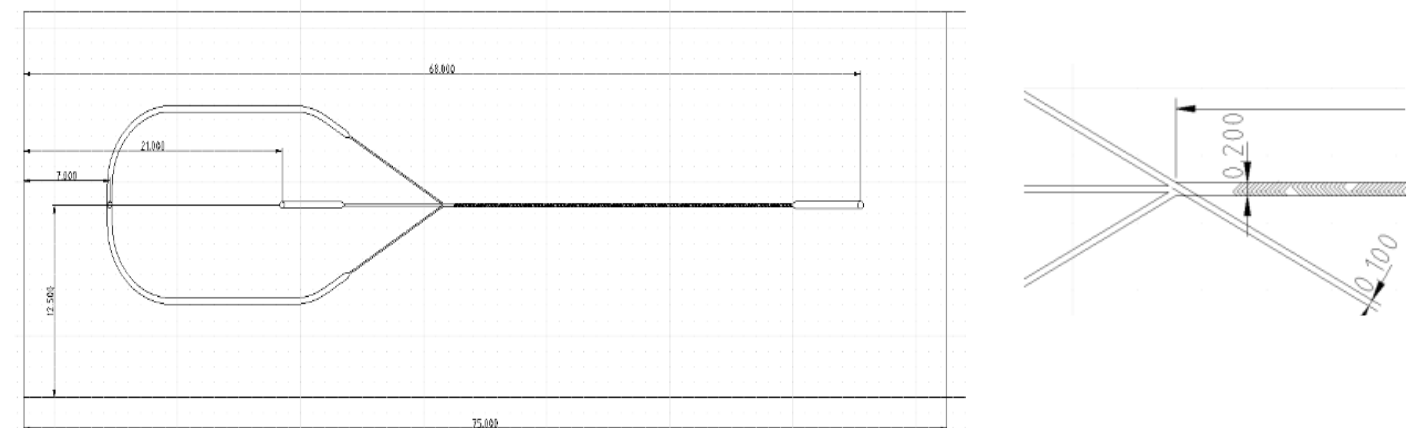
FLOW CONTROL		SOFTWARE	
Pumps**	Fluigent Flow EZ™ (7 bar)	Live control & Automated control	Fluigent OxyGEN Software
Flow sensors**	Fluigent FLOW UNIT (XL)	Imaging	OptoViewer

* Depending on FRR (download the Liposome production pack User Guide for more information)
 **For detailed specification: download Flow Unit User Manual.

MICROFLUIDIC CHIP	
Herringbone micromixer chip	Little Things Factory - T29
Material	Borofloat®33
Dimension	75 x 25 x 2 ± 0.3 mm
Mixer volume	0.47 µL
Mixer length	28.7 mm
Channel depth	0.08 – 0.11 mm
Channel width	0.1 – 0.5 mm
Pressure resistance mixer	15 bar



SETTING-UP THE PACK
 Please refer to the User Guide



IMAGING (OPTIONAL)

Microscope

Digital High-speed Opto Microscope

	Batch Method	Fluigent microfluidic method
Particle Size distribution	Low	High
Encapsulation efficiency	<30%	100%
Reproducibility	Low	High
Live particle size control	No	Precise
Range of particle size	Limited size range	Wide size range
Continuous production	No	Yes

TECHNICAL SUPPORT

Any question? E-mail us at:

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Or call our technical support team directly

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For a fully detailed FAQ for all Fluigent products, please visit:

<http://www.fluigent.com/faqs/>

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