

## Large-scale LIPEX<sup>®</sup> Extruder Equipment Request

We would appreciate if you could answer the following questions, so that we will be able to design your LIPEX<sup>®</sup> Extruder equipment.

<b><u>Product:</u></b>	
<b><u>Customer:</u></b>	
<b><u>Date:</u></b>	

<b>I.</b>		<b>Contact Information:</b>		
	<b>A.</b>	<b>Business Contact</b>		
		Name:		
		Address:		
		Telephone:		
		FAX:		
		e-mail address:		
		Company Web site:		
	<b>B.</b>	<b>Technical Contact</b>		
		Name:		
		Address:		
		Telephone:		
		FAX:		
		e-mail address:		
		Has a CDA been negotiated and signed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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<b>II.</b>	<b>General Product Information:</b>		
	A.	Have you previously purchased an Extruder from us?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	B.	Have you previously used extrusion to prepare batches?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	C.	At what scale has extrusion been used?	
	D.	Application	<input type="checkbox"/> R&D <input type="checkbox"/> cGMP
	E.	Lipid Concentration	mg/mL
	F.	Target Particle Size	nm
	G.	Required batch size (volume)	L
	H.	Required batch size (weight of lipid)	kg
	I.	Approximate phase transition temperature	°C
	J.	Average required extrusion pressure (psi)	
	H.	Other comments, requirements	

<b>III.</b>	<b>Pump Information:</b>		
	A.	Design requirements	<input type="checkbox"/> R&D <input type="checkbox"/> Hygienic
	B.	Required Flow rate (Please specify units of measure)	

<b>IV.</b>	<b>Extruder Information:</b>		
	A.	Size of filter-holder (diameter)	<input type="checkbox"/> 142mm <input type="checkbox"/> 293mm <input type="checkbox"/> unknown
	B.	Number	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> More(_____) <input type="checkbox"/> unknown
	C.	Other comments, requirements	

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<b>IV.</b>	<b>System Information:</b>		
	<b>A. Size limitations</b> <small>(please specify units of measure)</small>	<input type="checkbox"/> None	
	<b>B. Weight limitations</b> <small>(please specify units of measure)</small>	<input type="checkbox"/> None	
	<b>C. Electrical Requirements</b>	<input type="checkbox"/> 208V <input type="checkbox"/> 400V <input type="checkbox"/> 460V	<input type="checkbox"/> 50Hz <input type="checkbox"/> 60Hz
		<input type="checkbox"/> 1 phase <input type="checkbox"/> 3 phase	
		<input type="checkbox"/> Unknown <input type="checkbox"/> Other ( _____ )	
	<b>D. Temperature maintenance of product</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Unknown
	<b>E. Product contact surface finish</b>	<input type="checkbox"/> Mechanically finished to < 20 Ra µinch <input type="checkbox"/> Mechanically finished to < 15 Ra µinch and electro-polished <input type="checkbox"/> Mechanically finished to < 10 Ra µinch and electro-polished <input type="checkbox"/> Unknown <input type="checkbox"/> Other _____	
	<b>F. Hazardous zone requirement</b>	<input type="checkbox"/> No <input type="checkbox"/> Yes <small>(specify requirement _____)</small>	
	<b>G. Report generation for tasks performed on the system</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	<b>Chart recorder</b>	<input type="checkbox"/> Yes <input type="checkbox"/> Paperless recorder <input type="checkbox"/> Paper strip recorder <input type="checkbox"/> No	
	<b>H. Valve automation type</b>	<input type="checkbox"/> Air pneumatic actuators <input type="checkbox"/> Electric actuators <input type="checkbox"/> No preference	
	<b>I. Other comments, requirements</b>		

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Other comments or requirements

**Evonik Canada Inc.**  
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