

SUPPLEMENTARY MATERIAL

Table S1. *Experimental conditions to MPs Alg – Ppz*

	Alginate (w/w %) (30 mL)	Piperazine (w/w %) (300 mL)	Flow (l/h)	PR*
<i>Formulations</i>	0.5	0.05	5.4	0.85
	0.5	0.05	5.4	1
	0.5	0.05	5.8	0.85
	0.5	0.05	5.8	1
	0.5	0.05	6.1	0.85
	0.5	0.05	6.1	1
	0.5	0.05	6.5	0.85
	0.5	0.05	6.5	1
	0.5	0.05	6.7	0.85
	0.5	0.05	6.7	1
	0.75	0.075	5.4	0.85
	0.75	0.075	5.4	1
	0.75	0.075	5.8	0.85
	0.75	0.075	5.8	1
	0.75	0.075	6.1	0.85
	0.75	0.075	6.1	1
	0.75	0.075	6.5	0.85
	0.75	0.075	6.5	1
	0.75	0.075	6.7	0.85
	0.75	0.075	6.7	1
	1	0.1	5.4	1
	1	0.1	5.8	0.85
	1	0.1	5.8	1
	1	0.1	6.1	0.85
	1	0.1	6.1	1
	1	0.1	6.5	0.85
	1	0.1	6.5	1
	1	0.1	6.7	0.85
	1	0.1	6.7	1
	1.5	0.15	5.4	0.85
	1.5	0.15	5.4	1
	1.5	0.15	5.8	0.85
	1.5	0.15	5.8	1
	1.5	0.15	6.1	0.85
	1.5	0.15	6.1	1
	1.5	0.15	6.5	0.85
	1.5	0.15	6.5	1
	1.5	0.15	6.7	0.85
	1.5	0.15	6.7	1

*PR: (Air Pressure/Liquid Pressure)

Table S2. *Experimental conditions to MPs Alg – BaCl₂*

	<i>Alginate</i> (w/w %)	<i>Barium chloride</i> (w/w %)	<i>Flow</i> (L/h)	<i>PR*</i>
	(30 mL)	(300 mL)		
<i>Formulations</i>	2	2	5.4	1
	2	2	5.8	0.85
	2	2	5.8	1
	2	2	6.1	0.85
	2	2	6.1	1
	2	2	6.5	0.85
	2	2	6.5	1
	2	2	6.7	0.85

*PR: (Air Pressure/Liquid Pressure)