

## Supplementary File

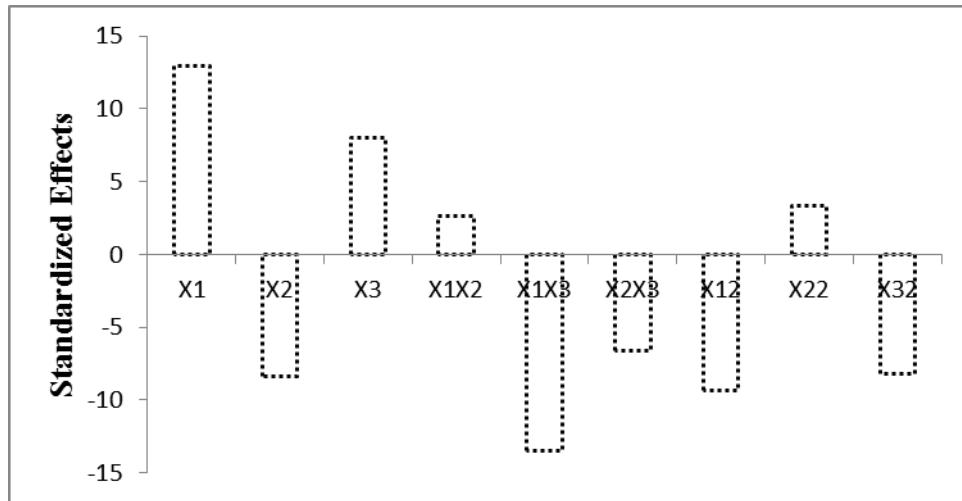
**Table 1:** Summary of each factor effect and its p-values for responses Mean globule size (nm) and Encapsulation Efficiency (%)

Factor	Mean globule size (nm)		Encapsulation Efficiency (%)	
	Factor effect	p value	Factor effect	p value
Intercept	176.31		71.31	
X <sub>1</sub> <sup>@</sup>	12.95	0.0031	6.01	0.030
X <sub>2</sub> <sup>\$</sup>	-8.39	0.0245	-11.67	0.0012
X <sub>3</sub> <sup>*</sup>	8.01	0.0295	-4.37	0.088
X <sub>1</sub> X <sub>2</sub> <sup>ε</sup>	2.64	0.5444	-6.85	0.0647
X <sub>1</sub> X <sub>3</sub> <sup>ε</sup>	-13.49	0.0141	6.88	0.064
X <sub>2</sub> X <sub>3</sub> <sup>ε</sup>	-6.65	0.1537	-5.71	0.110
X <sub>1</sub> <sup>2 α</sup>	-9.343	0.0545	5.74	0.102
X <sub>2</sub> <sup>2 α</sup>	3.34	0.4370	-6.91	0.057
X <sub>3</sub> <sup>2 α</sup>	-8.195	0.0828	-17.44	0.0007

<sup>@</sup> Capryol 90 (oil); <sup>\$</sup> HPMCAS-HF (polymer); <sup>\*</sup>Aerosil 200 (adsorbent)

<sup>ε</sup>Interaction terms; <sup>α</sup>high order effect

**Figure 1 [A]: Evaluation of the standardized effects of the Capryol® 90 ( $X_1$ ), HPMCAS-HF ( $X_2$ ) and Aerosil® 200 ( $X_3$ ), and their interactions on mean globule size ( $Y_1$ )**



**Figure 1 [B]: Evaluation of the standardized effects of the Capryol® 90 ( $X_1$ ), HPMCAS-HF ( $X_2$ ) and Aerosil® 200 ( $X_3$ ), and their interactions on encapsulation efficiency ( $Y_2$ )**

