

Supplementary Materials

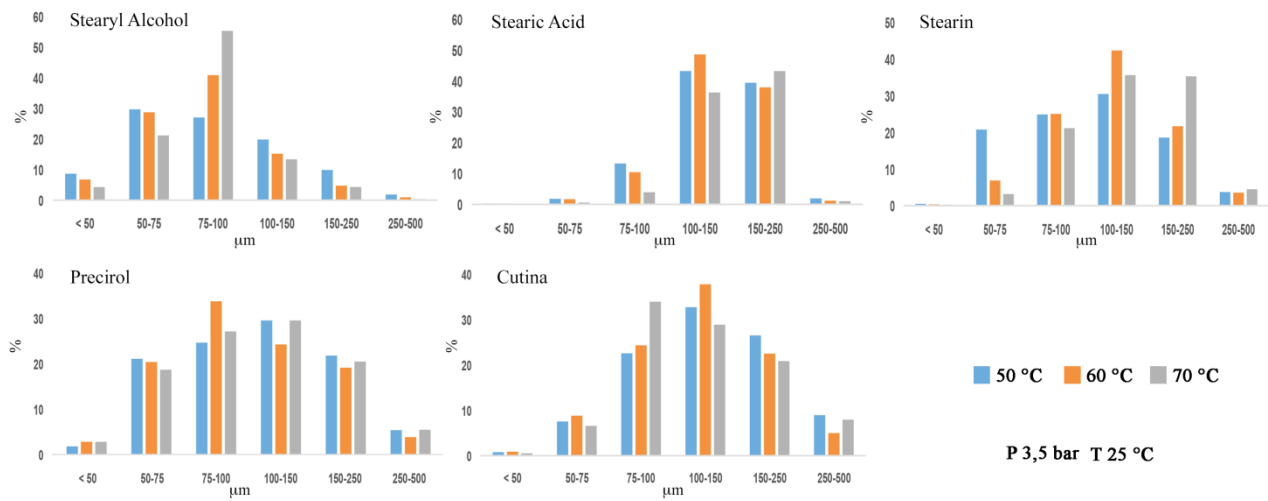


Figure S1: Size distribution (%) of MPs as a function of the WPN temperature.

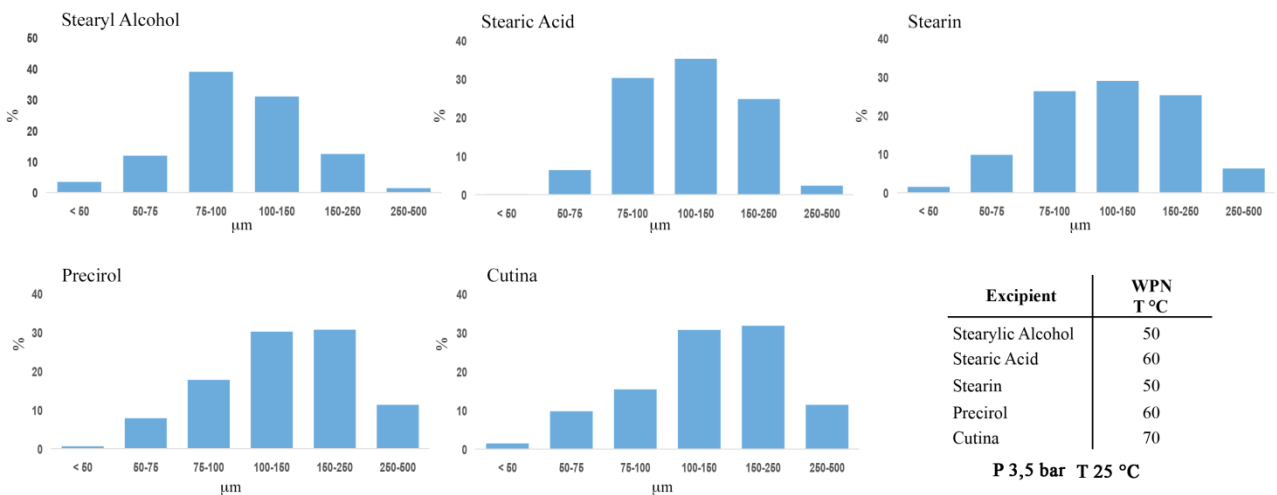


Figure S2: Size distribution (%) of MPs-AL. In the table are reported the WPN parameters for each excipient.

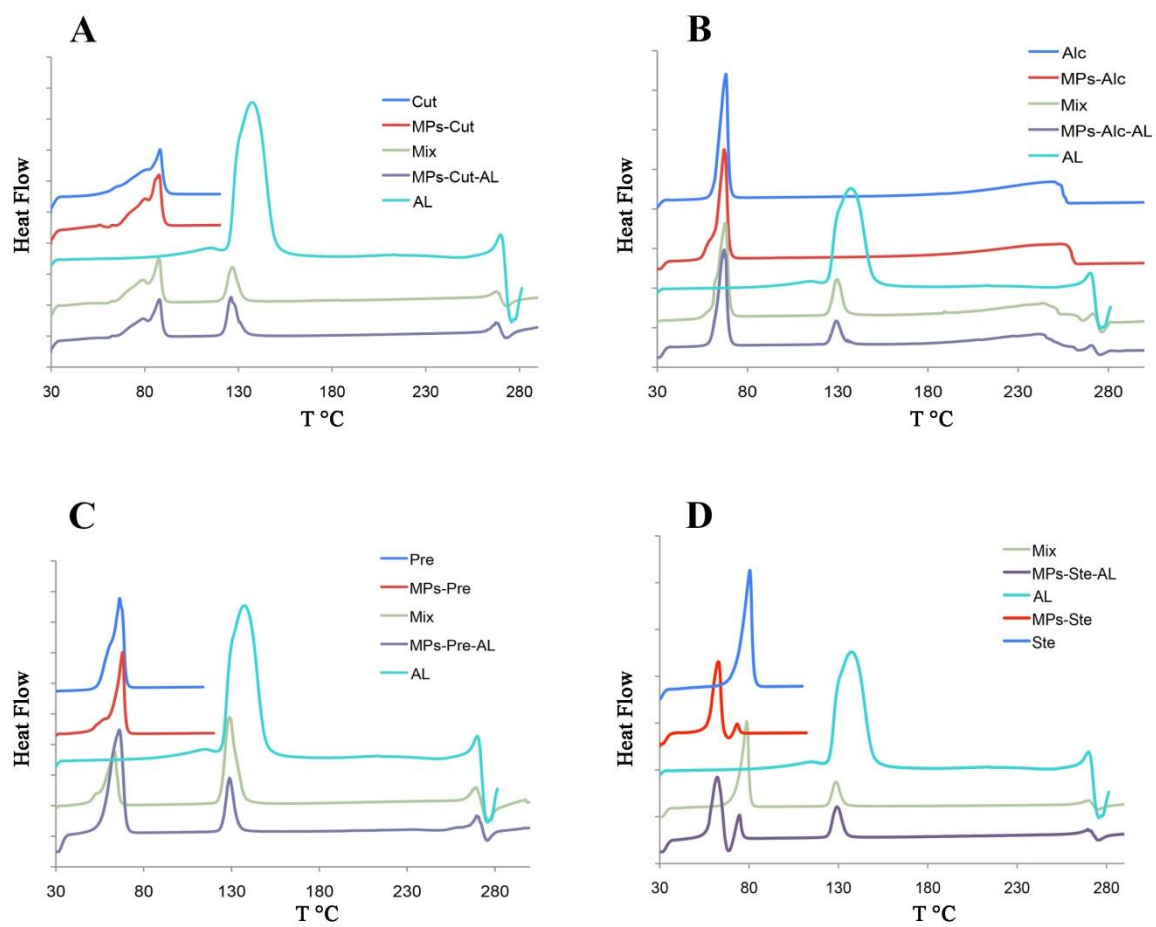


Figure S3: DSC thermograms recorded on: **A** Stearic acid-based samples; **B.** Stearyl Alcohol-based samples **C** Precirol-based samples; **D** Stearine-based samples .

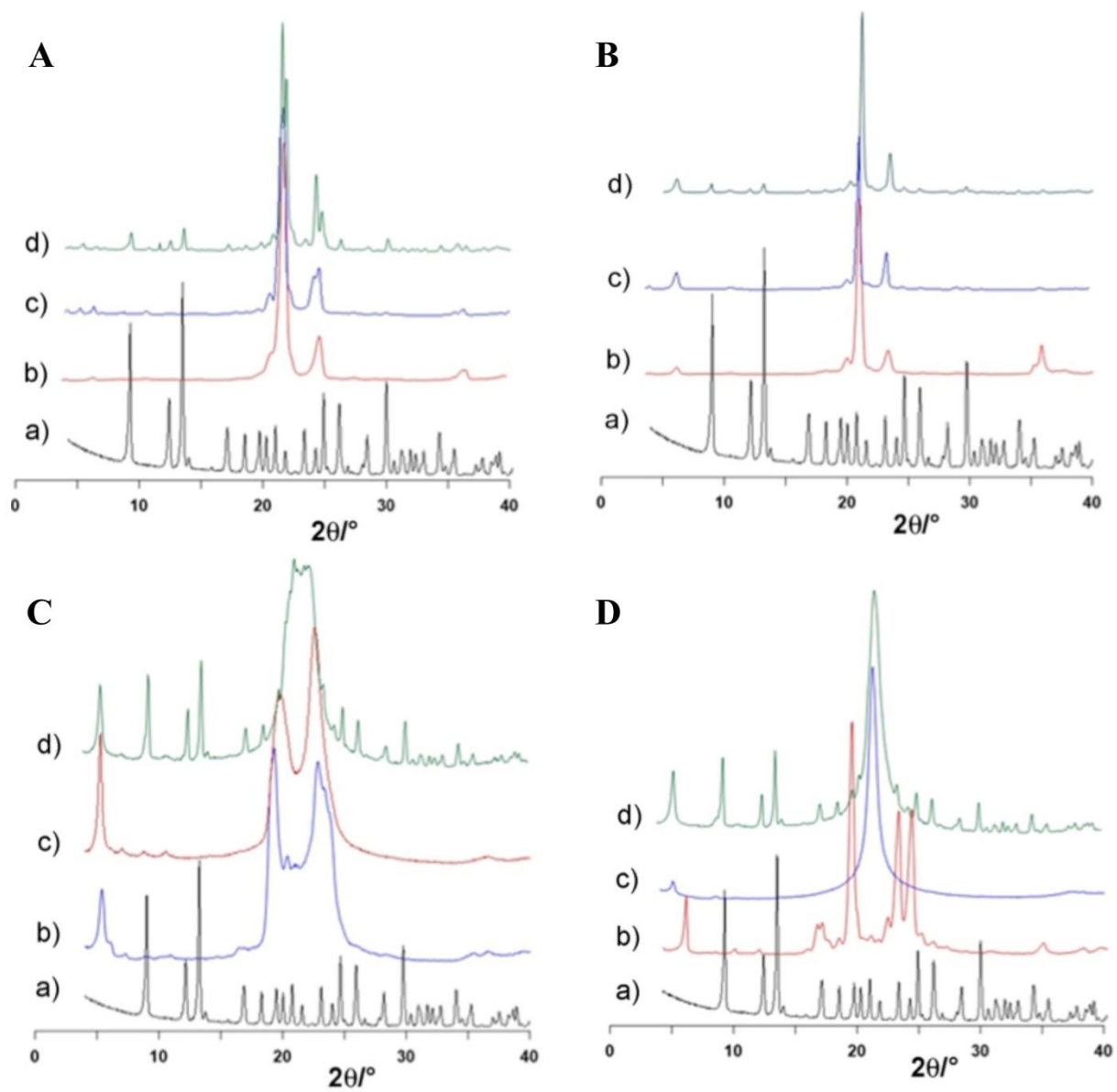


Figure S4: X-Rays Diffraction patterns of MPs obtained from different excipients, empty and loaded with AL. **Fig. A:** a) AL; b) ACI; c) MPs-ACI; d) MPs-ACI-AL; **Fig. B:** a) AL; b) ALC; c) MPs-ALC; d) MPs-ALC-AL; **Fig. C:** a) AL; b) PRE; c) MPs-PRE; d) MPs-PRE-AL; **Fig.D:** a) AL; b) STE; c) MPs-STE; d) MPs-STE-AL.

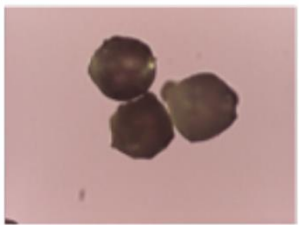
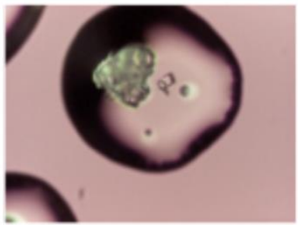
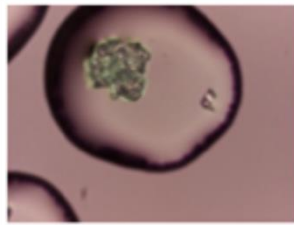
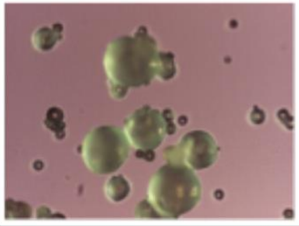
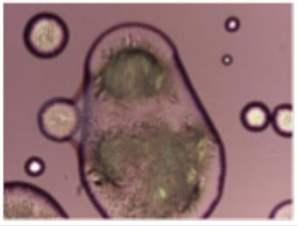
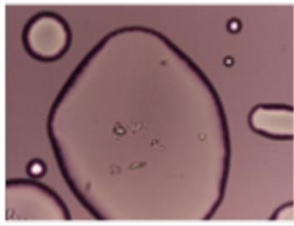
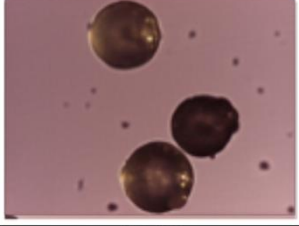

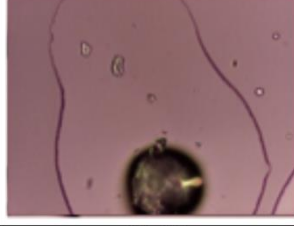
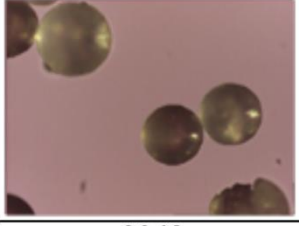
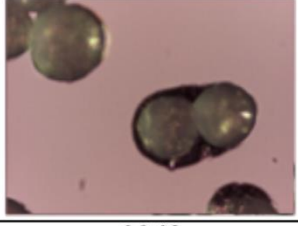
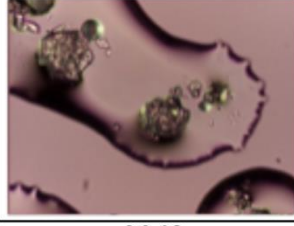
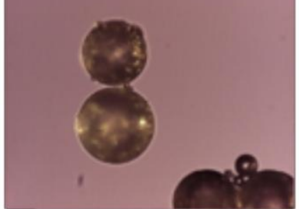


Sample	Images taken at different temperature		
	30 °C	60 °C	70 °C
MPs-Alc-AL			
MPs-Aci-AL	30 °C 	57 °C 	64 °C 
MPs-Ste-AL	30 °C 	70 °C 	72 °C 
MPs-Pre-AL	30 °C 	57 °C 	60 °C 
MPs-Cut-AL	30 °C 	88 °C 	90 °C 

Figure S5: Hot Stage Microscopy (HSM): Images of MPs-AL at different temperatures.