Supplementary materials

A novel approach to optimize hot melt impregnation in terms of amorphization efficiency

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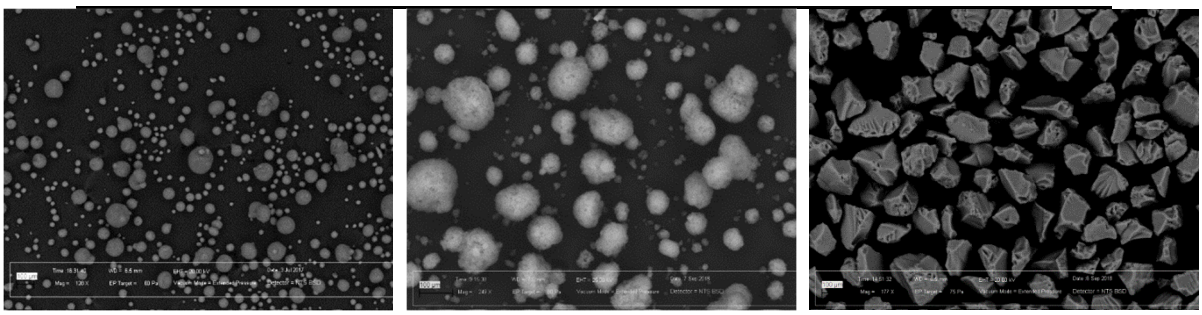
Table 1. Comparison of Neusilin US2 Florite PS-200 Syloid XDP 3150 properties*.

	Neusilin US2	**Florite PS-200**	**Syloid XDP 3150**
Chemical name	magnesium aluminosilicate	Calcium silicate	Silicon dioxide
Appearance	White granules	White fine granulate	White free flowing powder
Oil absorption [ml/g]	2,7-3,4	3,7	3,0
Bulk densitiy [g/cm3]	0,13-0,18	0,07	0,275
Average particle size [um]	106	150	150
pH as 1 % aqueous slurry	6-8	8,4-11,2	4,0 – 7,0
Specific surface area [m2/g]	420	130	320
Average pore size [nm]	15	200	10

* based on sellers' documents.

Table 2. Determination of IBU heat of fusion (melting enthalpy) using DSC.

Sample number	Sample weight	Heat measured during melting	Heat of fusion of the sample	Average heat of fusion (n = 6)
	[mg]	[mJ]	[mJ/mg]	[mJ/mg]
1	0.127	14.73	115.98	
2	0.132	15.47	117.20	
3	0.564	70.67	125.30	123.45
4	0.539	67.19	124.66	
5	1.004	130.9	130.38	
6	1.021	129.85	127.18	



(**A**) (**B**) (**C**)

Figure S1. SEM image Neusilin US2 (**A**), Florite PS-200 (**B**), Syloid XDp 3150 (**C**).

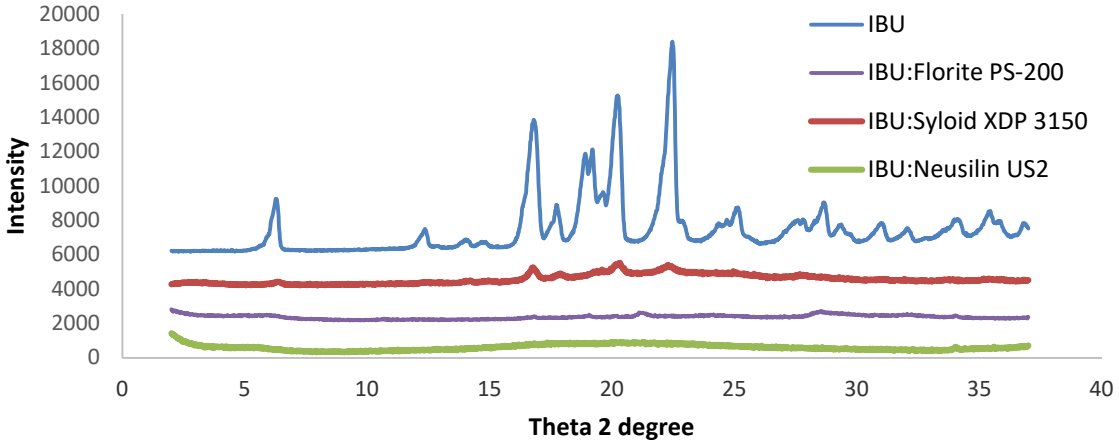


Figure S2. XRPD difractograms of extrudaes based on different carriers.

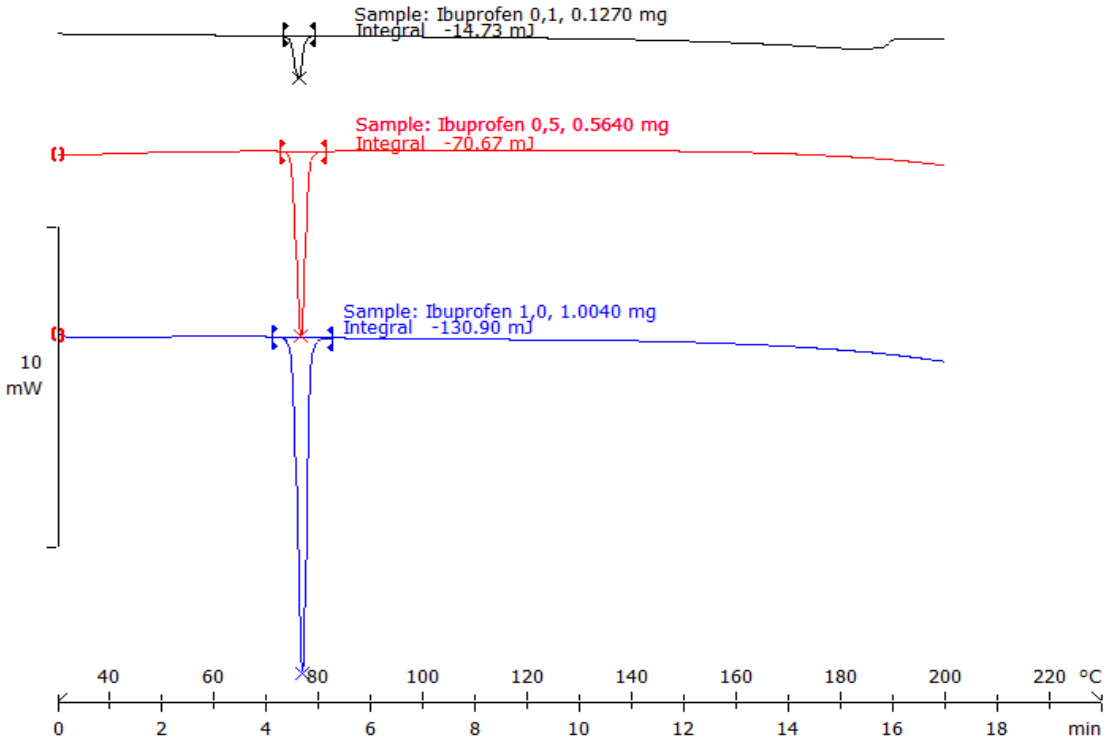


Figure S3. Thermal effects of different amounts of crystalline IBU.

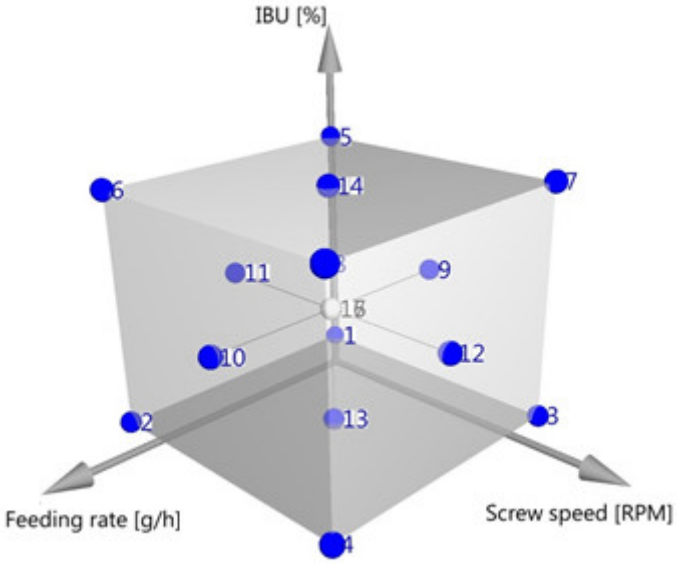


Figure S4. The experimental matrix.