

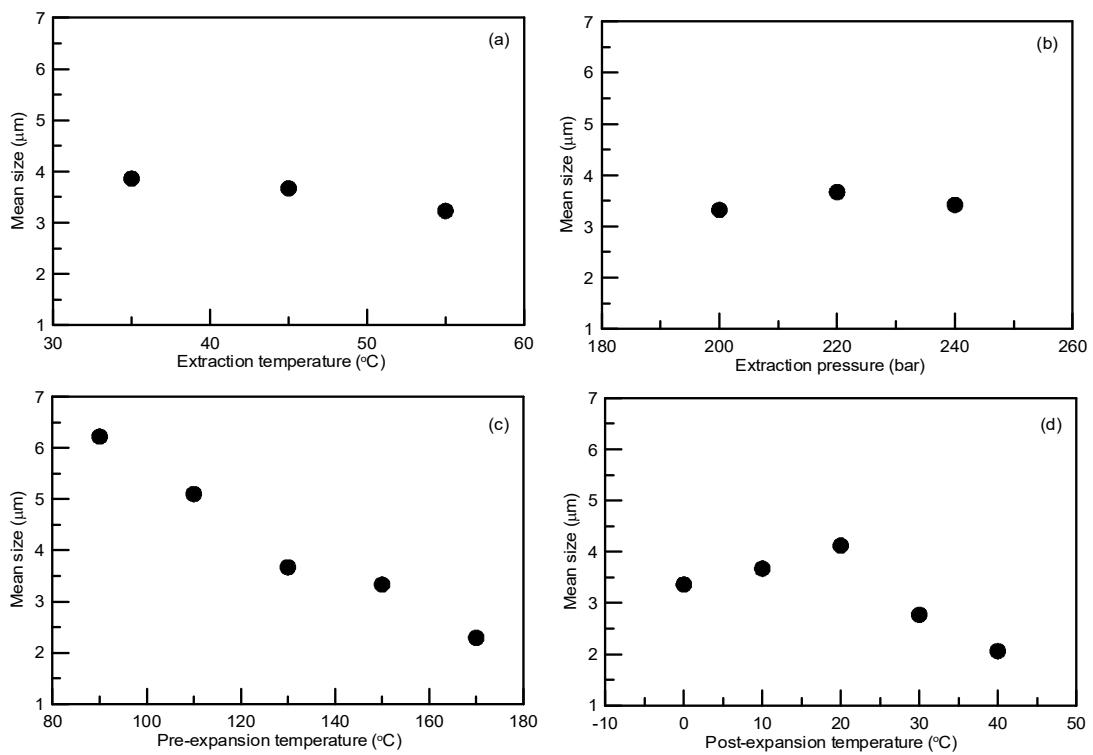
# Supplementary Materials: Application of Box–Behnken Design to Investigate the Effect of Process Parameters on the Microparticle Production of Ethenzamide through the Rapid Expansion of the Supercritical Solution Process

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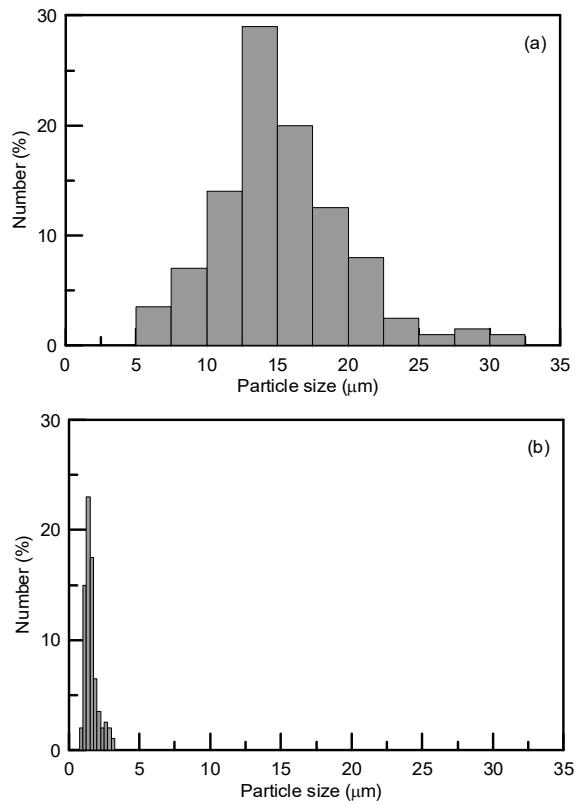
**Table S1.** Operating conditions and results of RESS processing of ethenzamide.

Exp. no.	T <sub>ext</sub> (°C)	P <sub>ext</sub> (bar)	T <sub>pre</sub> (°C)	T <sub>post</sub> (°C)	Mean size (μm)	SD (μm)
Unprocessed	----	----	----	----	15.35	4.70
S1	<b>45</b>	<b>220</b>	<b>130</b>	<b>10</b>	3.67	1.23
S2	<b>35</b>	220	130	10	3.86	1.50
S3	<b>55</b>	220	130	10	3.23	1.09
S4	45	<b>200</b>	130	10	3.32	1.25
S5	45	<b>240</b>	130	10	3.42	1.21
S6	45	220	<b>90</b>	10	6.22	2.08
S7	45	220	<b>110</b>	10	5.10	2.07
S8	45	220	<b>150</b>	10	3.33	1.29
S9	45	220	<b>170</b>	10	2.29	0.96
S10	45	220	130	<b>0</b>	3.36	1.18
S11	45	220	130	<b>20</b>	4.12	1.45
S12	45	220	130	<b>30</b>	2.77	1.09
S13	45	220	130	<b>40</b>	2.06	0.76

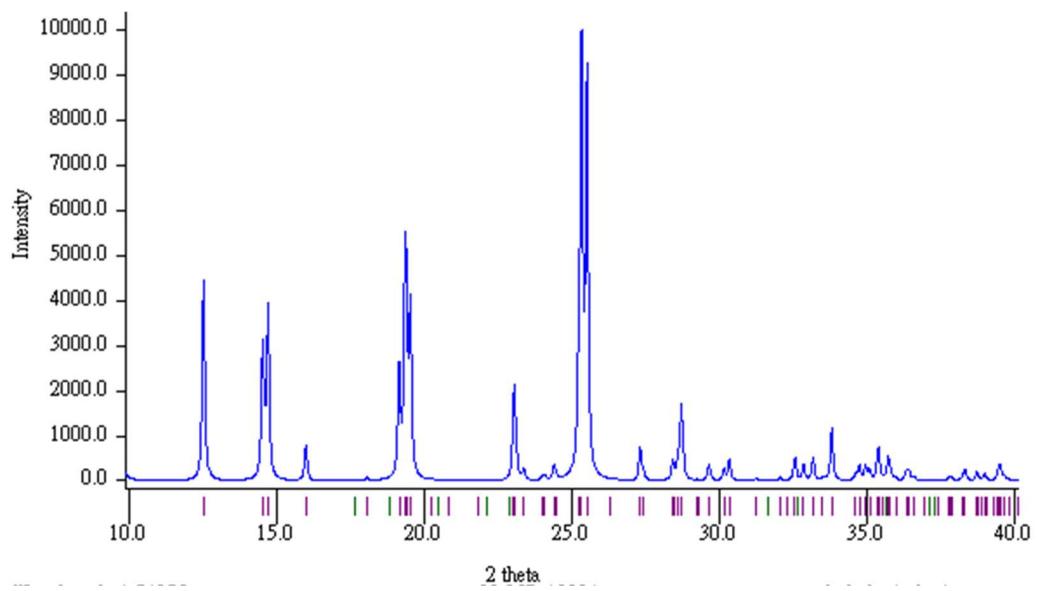
(a) SD: Standard deviation of the particle size distribution.



**Figure S1.** Effects of (a) extraction temperature (b) extraction pressure (c) pre-expansion temperature, and (d) post-expansion temperature on the mean size of RESS-processed ethenzamide.



**Figure S2.** Particle size distribution of (a) unprocessed ethenzamide and (b) RESS-processed ethenzamide from Experiment 12.



**Figure S3.** PXRD patterns of ethenzamide from CCDC database (CCDC number: 760137).