SUPPORTING INFORMATION

Distinct Crystallization Pathways of Polyoxymethylene in methanol system

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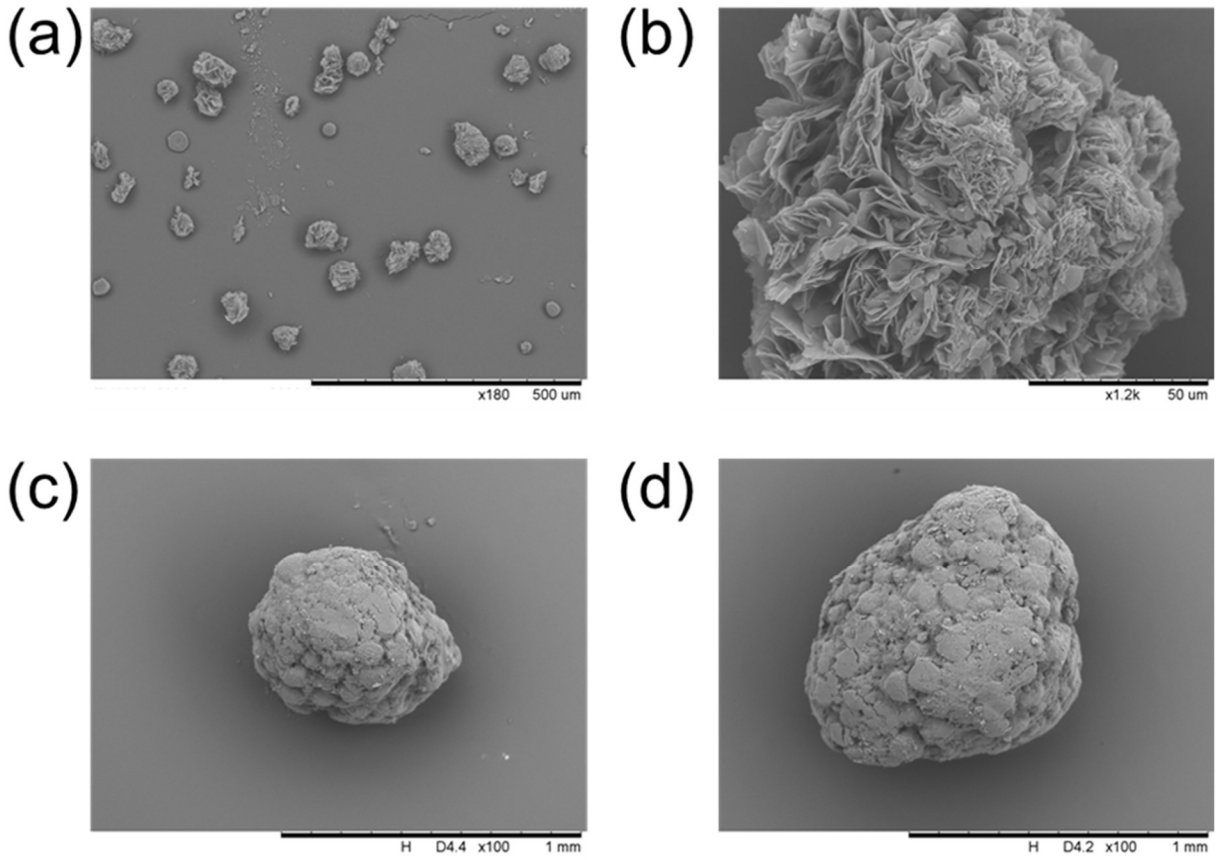

Figure S1. (a-b) SEM morphology of the product removed at 130 °C. and (c-d) SEM morphology of the product removed at 25°C.

Table S1. Solubility and cloud point of the POM-methanol system.

POM Concentration (g/100g)	Dissolving Temperature (℃)			Cloud Point (℃)		
0.0304	133.5	133.3	133.8	122	121.2	121.5
0.051	135.4	135.5	135.7	125.3	125.8	125.2
0.0805	136.7	136.4	136.4	126	126.3	125.9
0.1003	138.2	138.3	137.8	126.5	126.3	126.8
0.1516	141.9	141.7	141.9	127.5	127.3	127.8
0.2017	146.7	146.5	146.9	129.4	129.5	128.8

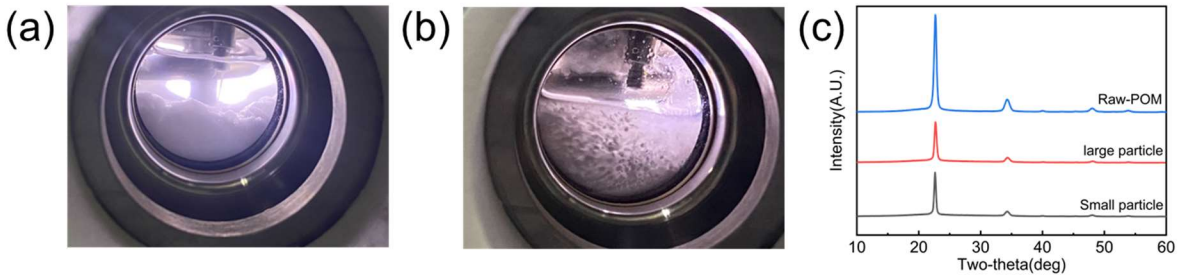

Figure S2. (a) Melting point of POM at 160°C. (b) Molten POM at 127 °C from the crystal. and (c) PXRD patterns of POM raw materials and two products.

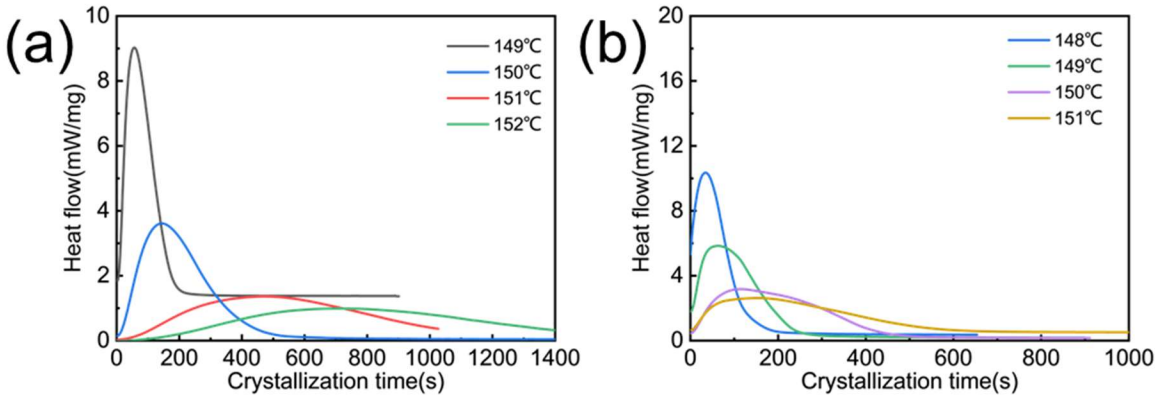

Figure S3. Heat flow rate versus time plot for raw materials and products (a) raw materials. and (b) large particles.

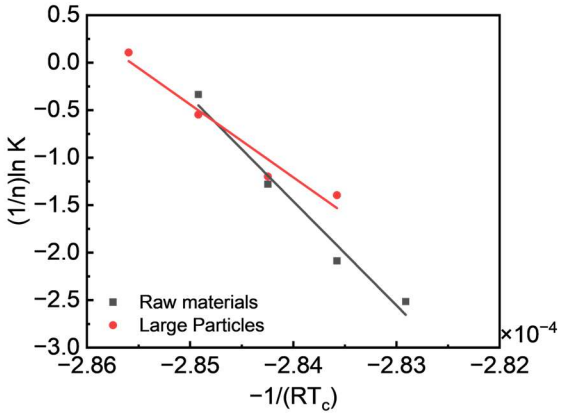

Figure S4. Fitted Arrhenius equation for POM raw materials and large particle products.

Table S2. Relevant data from the Arrhenius equation.

Sample	ΔE_a(kJ/mol)	R^2
Raw materials	-312.883	0.975
Large particles	-218.845	0.956