

## Supplementary data

### **Influence of Template Content on Selective Synthesis of SAPO-18, SAPO-18/34 Intergrowth and SAPO-34 Molecular Sieves Used for Methanol-to-Olefins Process**

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**Table S1.** The carbon content and calculated template weight content of as-synthesized samples.

Sample	Carbon content <sup>a</sup> (wt%)	Template content calculated based on (CH <sub>3</sub> CH <sub>2</sub> ) <sub>4</sub> N-OH (wt%)	Template content calculated based on (CH <sub>3</sub> CH <sub>2</sub> ) <sub>4</sub> N <sup>+</sup> (wt%)
1.6T (SAPO-18)	15.68	24.03	21.26
2.0T (SAPO-18/34)	12.15	18.63	16.48
2.4T (SAPO-34)	10.82	16.59	14.67

<sup>a</sup> Carbon content (wt%)= The mass of carbon of as-synthesized sample/ The mass of as-synthesized sample × 100%.

The carbon content of the deactivated catalysts (methanol conversion was less than 50%) were measured on a HIR-944B infrared carbon and sulfur analyzer (Wuxi High-speed analyzer Co., China), samples were dried before analysis. The mass percentage of templates for as-synthesized samples were calculated based on (CH<sub>3</sub>CH<sub>2</sub>)<sub>4</sub>N-OH or (CH<sub>3</sub>CH<sub>2</sub>)<sub>4</sub>N<sup>+</sup> respectively.