

Supplementary Materials

Synthesis of Multi-butylnaphthalene Base Oils Catalyzed by Trifluoromethanesulfonic Acid and Its Lubricating Properties

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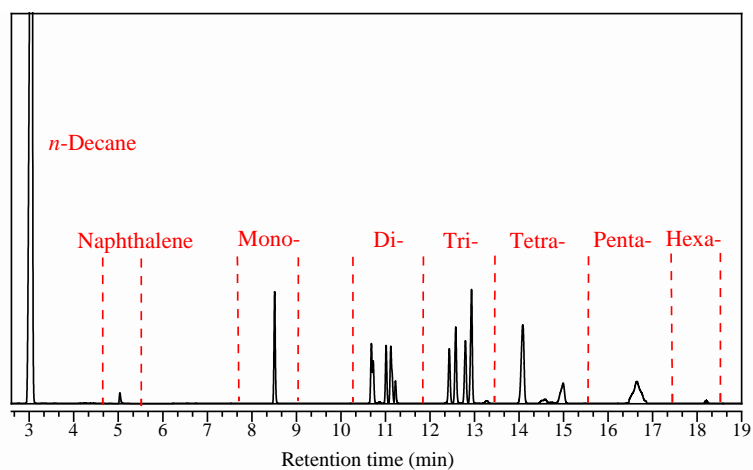


Figure S1. Retention time of the alkylation of naphthalene with *n*-butene.

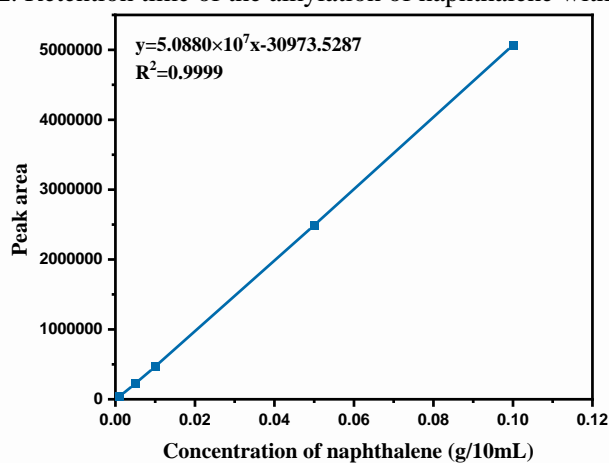


Figure S2. The standard curve of naphthalene.

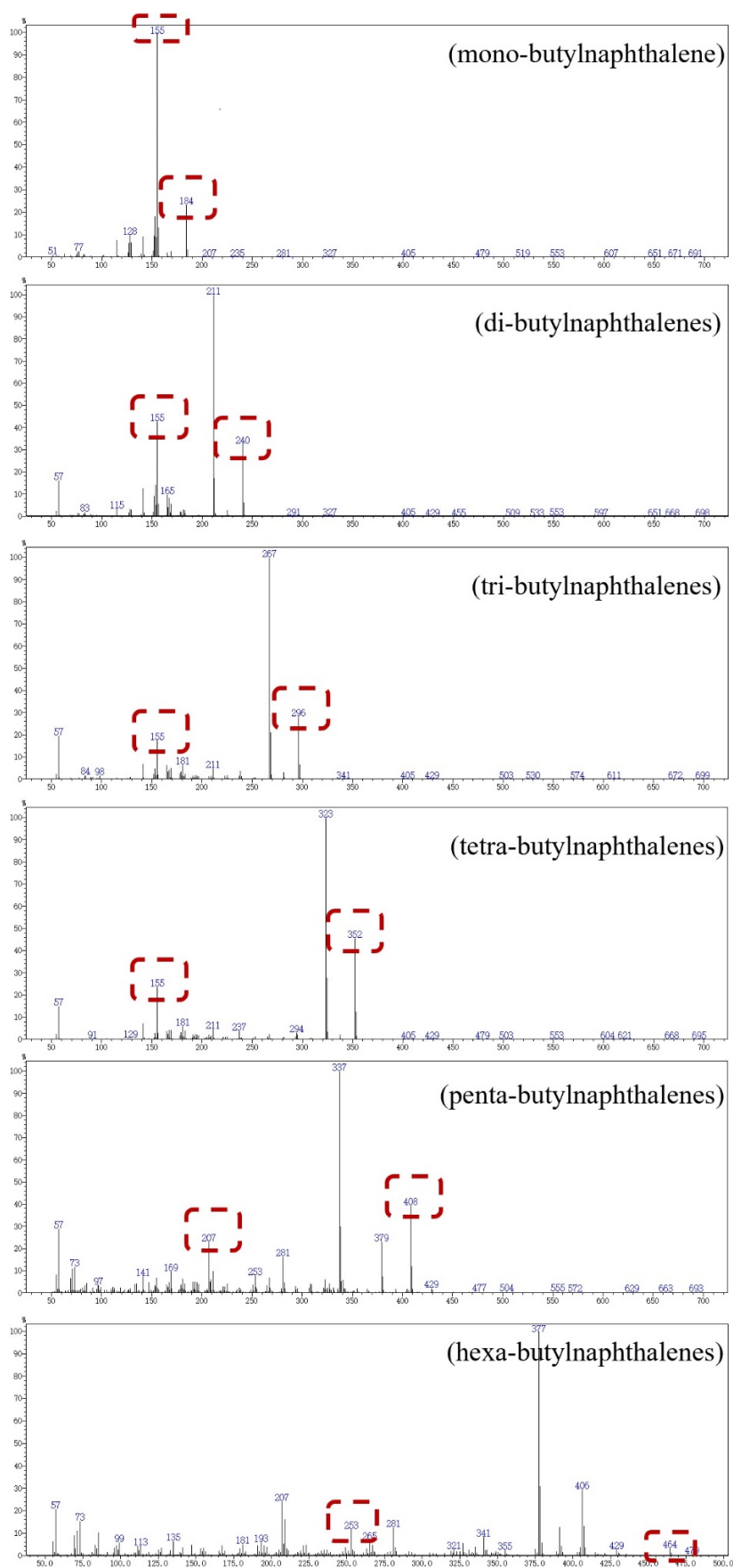


Figure S3. The GC-MS results of the multi-butyl naphthalenes.

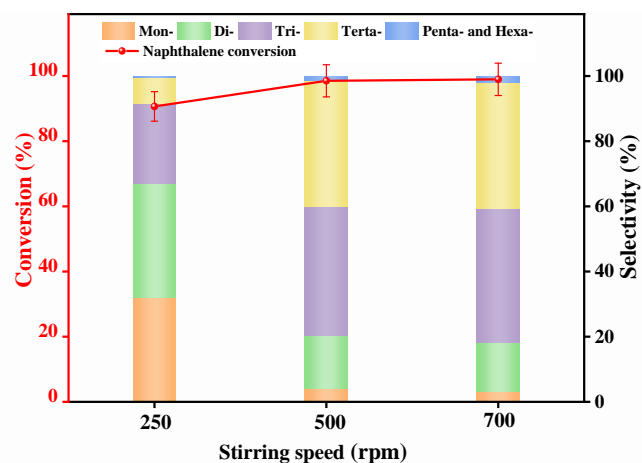


Figure S4 Effect of stirring speed on the alkylation of naphthalene with *n*-butene.

Reaction conditions: TfOH dosage=3.2 wt%; T=60 °C; flow rate of *n*-butene=20 mL/min; 40 min.