

## Electronic Supplementary Information

# Sulfonated Phenylamine Ionic Liquids as Efficient Phase-Separation Catalysts for Synthesis of Trimethylolpropane Triacrylate

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Table S1. Elemental analysis results of the PS<sub>n</sub>-PA

样品	N(%)	C(%)	H(%)	O(%)	S(%)
PS <sub>1</sub> -PA	6.2	50.1	6.0	22.7	15.0
PS <sub>2</sub> -PA	4.1	42.9	5.7	29.3	18.0
PS <sub>3</sub> -PA	3.0	39.7	5.6	31.8	19.9

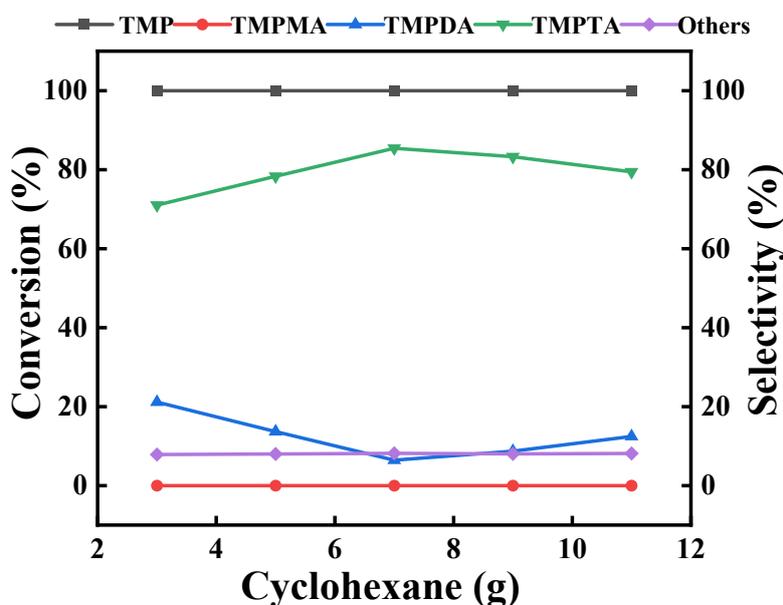


Figure S1. Influence of the amount of water agent towards TMP conversion and TMPTA selectivity

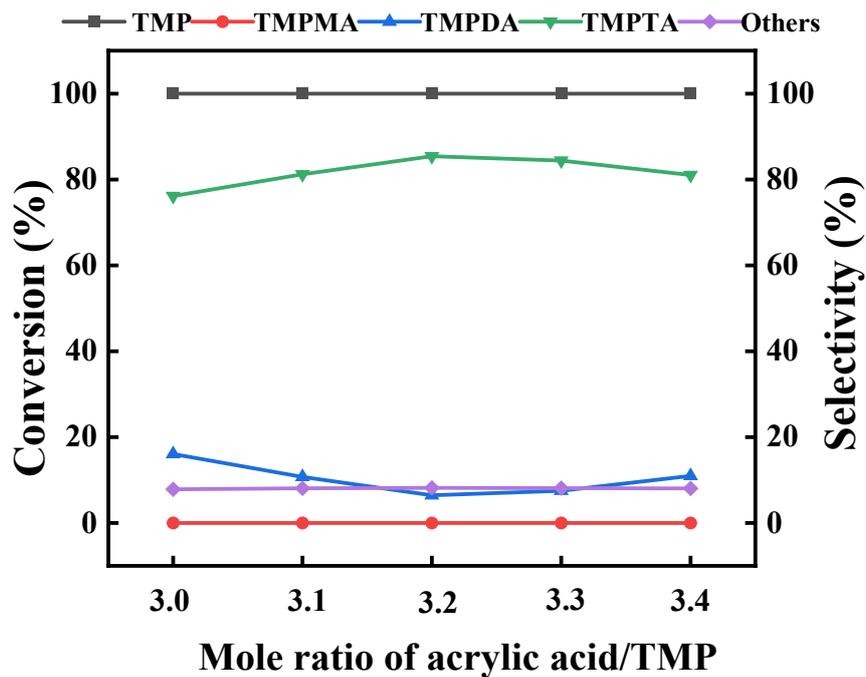


Figure S2. Influence of molar ratio of acrylic acid to TMP towards esterification reaction

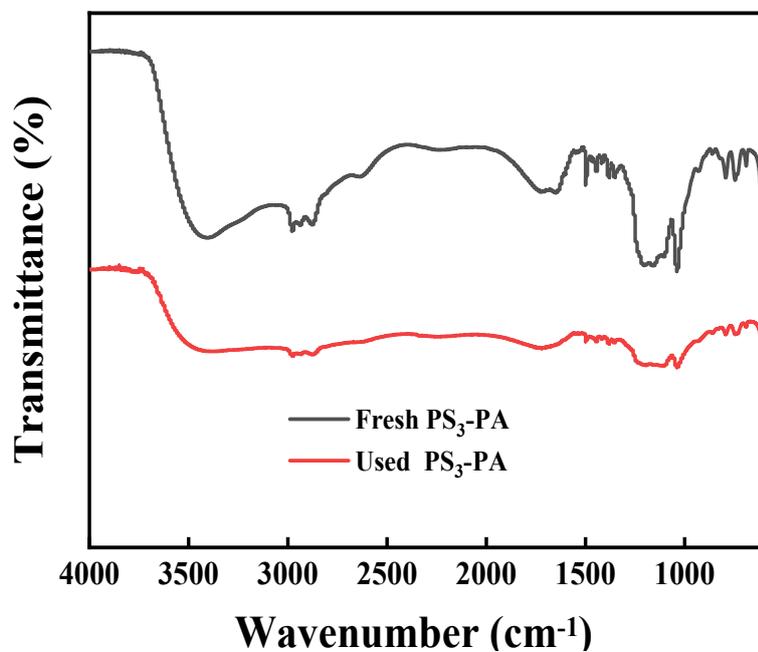


Figure S3. FT-IR spectra for the fresh and recycled PS<sub>3</sub>-PA

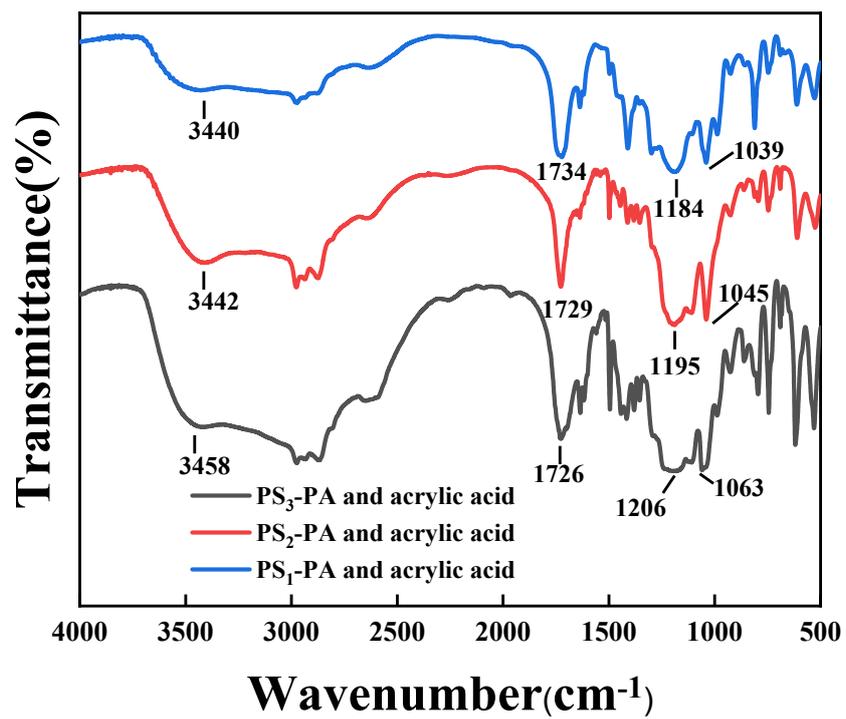


Figure S4. FT-IR spectra for PS<sub>n</sub>-PA and acrylic acid