

## **Supporting Information:**

# **Measurement and Correlation for the Solubility of Sodium p-Toluenesulfonate, Sodium Sulfite, Sodium p-Methylphenoxide in Aqueous Sodium Hydroxide Solutions and Sodium Sulfite in Aqueous Ethanol Solutions**

Kang-Kang Pei, Rui-Xiong Zhao, Guo-Liang Zhang, Qing Xia\*, Feng-Bao Zhang\*

*School of Chemical Engineering and Technology, Tianjin University, Tianjin, 300072, PR China.*

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## AUTHOR INFORMATION

### Corresponding Author

Qing XIA

Professor

School of chemical engineering and technology

Tianjin University

Tianjin, 300072, P. R. of China

Telephone number: 86-22-27408778

E-mail address: [xiaqing@tju.edu.cn](mailto:xiaqing@tju.edu.cn)

ORCID: 0000 0003 0941 8852

Fengbao ZHANG

Professor

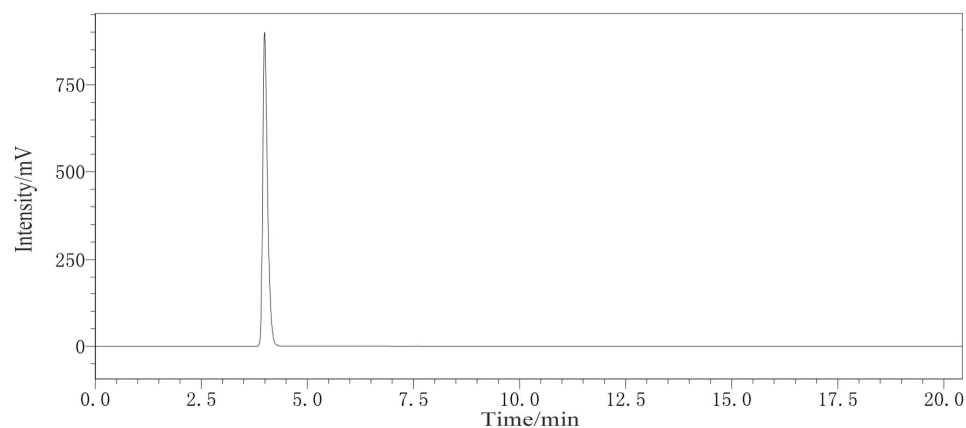
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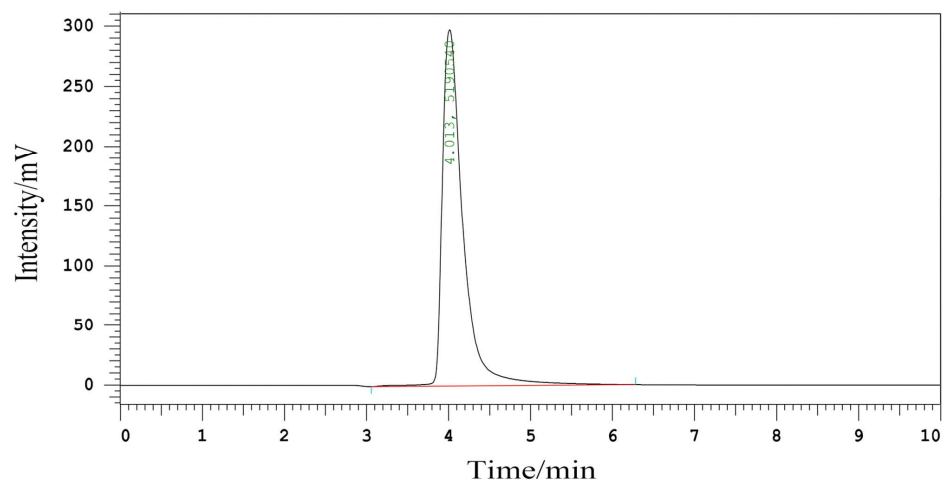
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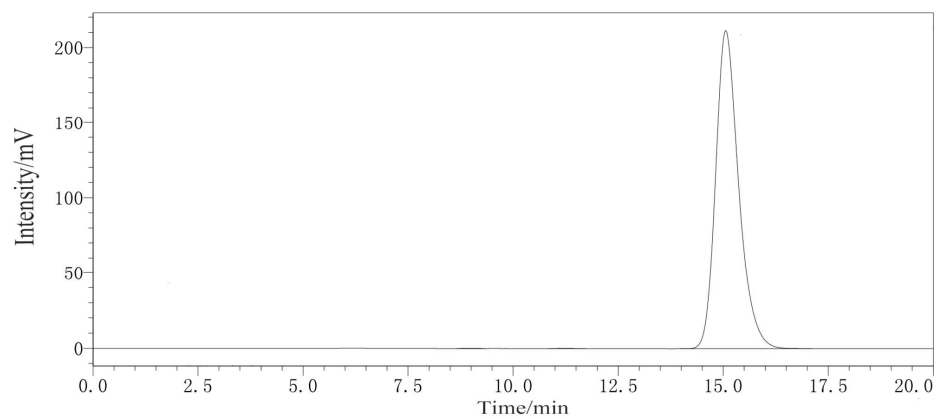
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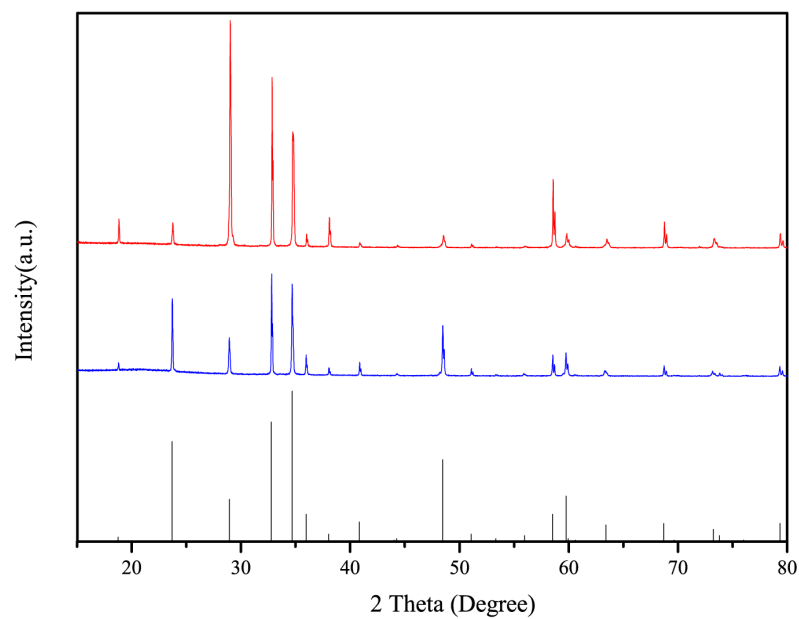
**Figure S1.** HPLC Analysis of NaPTS Used in This Work.



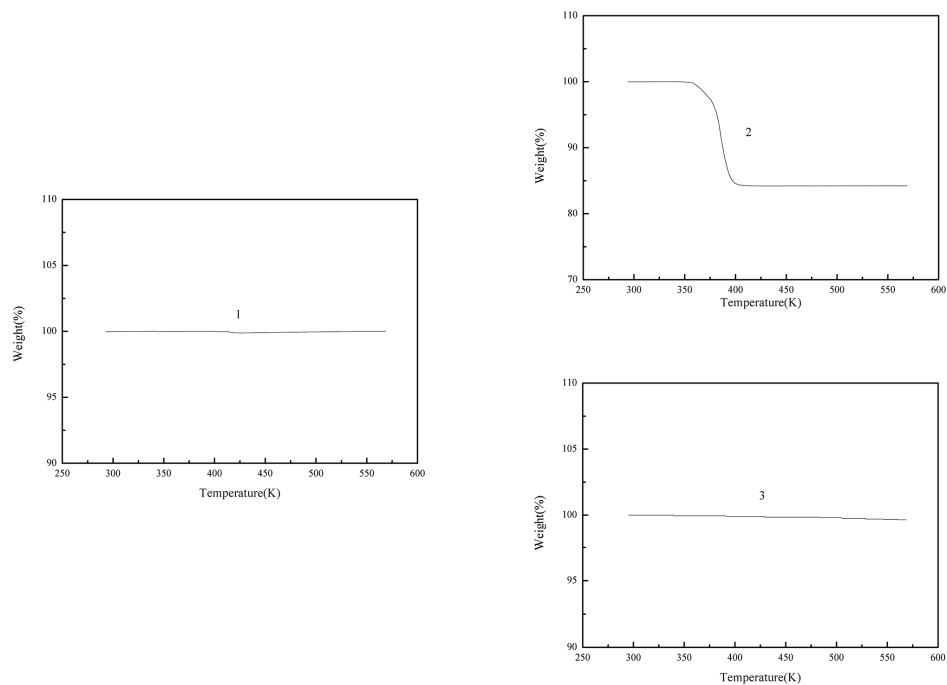
**Figure S2.** HPLC Analysis of  $\text{Na}_2\text{SO}_3$  Used in This Work.



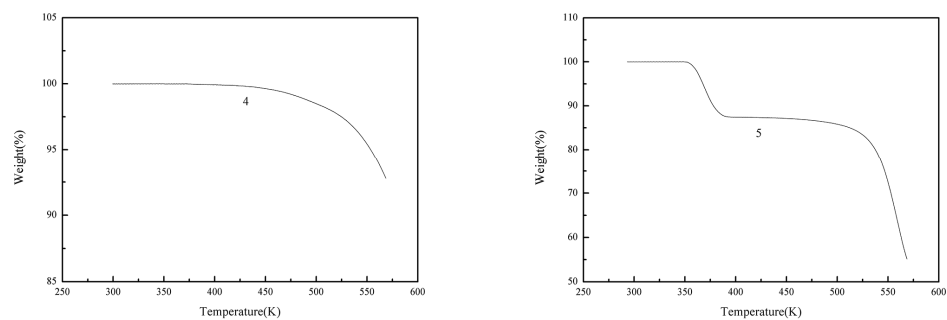
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**Figure S5.** Thermal Degradation of Purchased NaPTS (1), Precipitated NaPTS at the Temperature Lower than the Transition Temperature (2) and Precipitated NaPTS at the Temperature Higher than the Transition Temperature (3) in Nitrogen by the TGA Analysis.



**Figure S6.** Thermal Degradation of Synthetic NaCRS (4) and Precipitated NaCRS (5) in Nitrogen by the TGA Analysis.