

Supporting Information

A novel method of solid state ninhydrin reaction and its application in the quantification of oil-soluble amine polymers

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Figure S1. Thin-layer chromatographic analysis of aniline and three amino polymers with dichloromethane as the developing solvent. A: aniline, B: PEA, C: PIBA, D: Mannich.

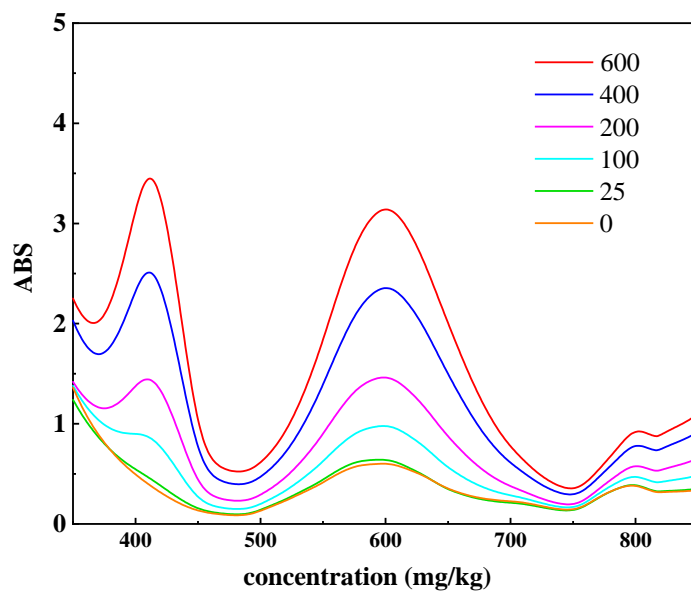
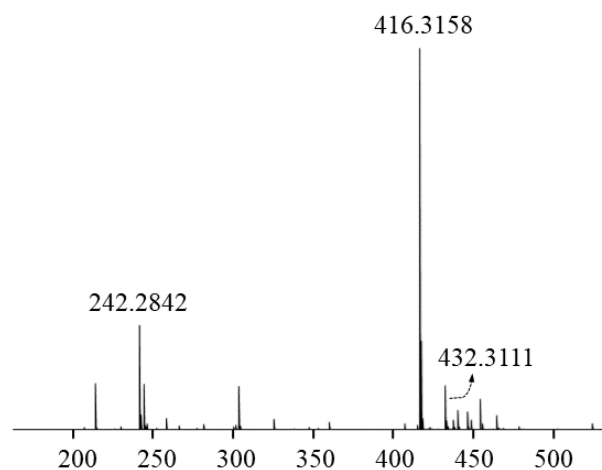


Figure S2. The UV-Vis spectra of PIBA reacting with ninhydrin at different concentrations.

(I) Hexadecylamine reacted with ninhydrin



(II) Structural formula for feedstock (left) and intermediate (right)

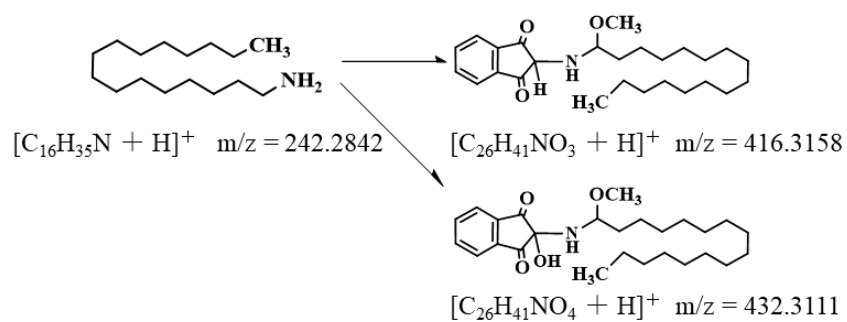


Figure. S3. The mass spectrum of hexadecylamine and structural formulae of the feedstocks and intermediates of hexadecylamine.

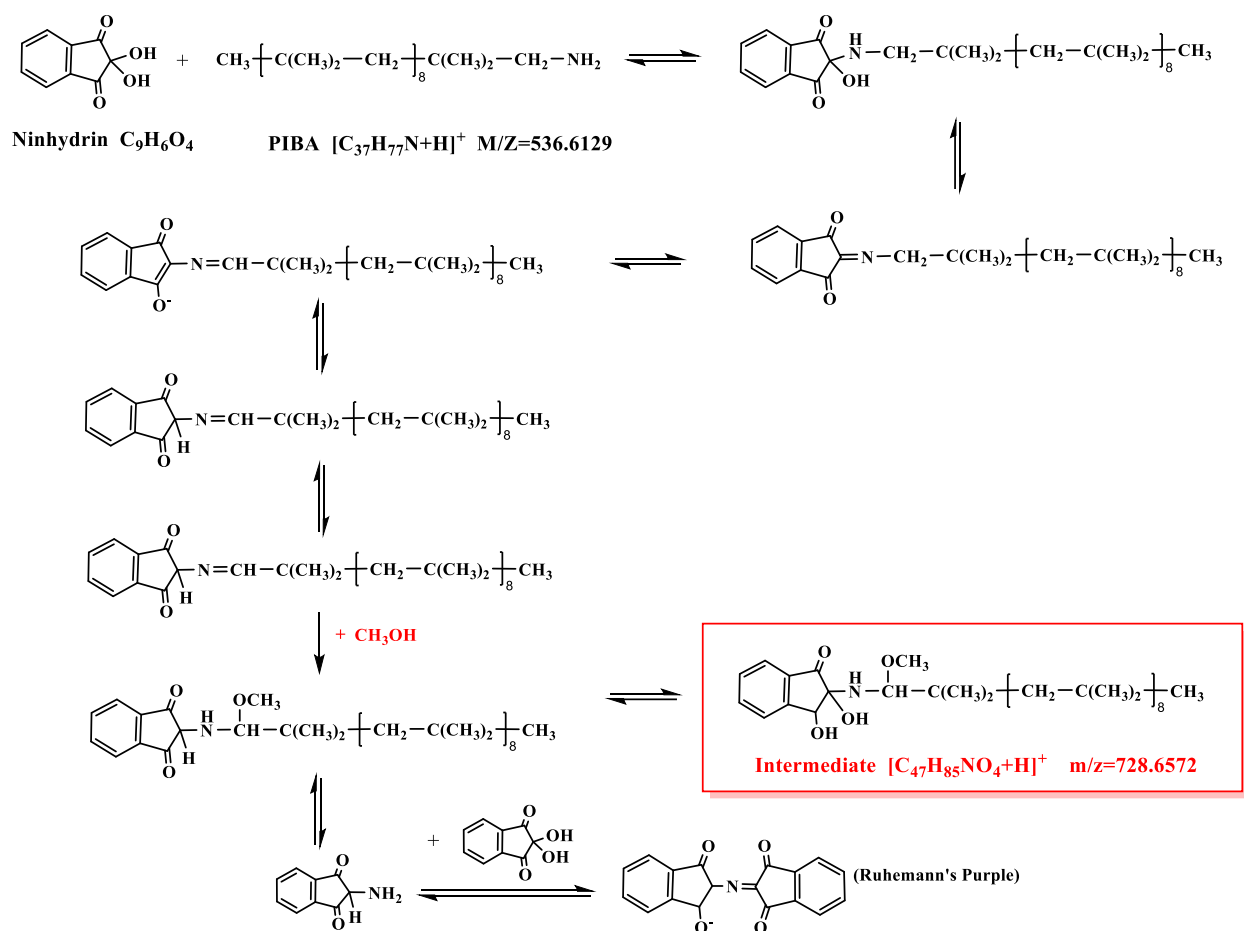


Figure S4. Reaction mechanism of PIBA and ninhydrin

