

Supporting Information

Studies on the synthesis and application properties of a betaine surfactant with a benzene ring structure

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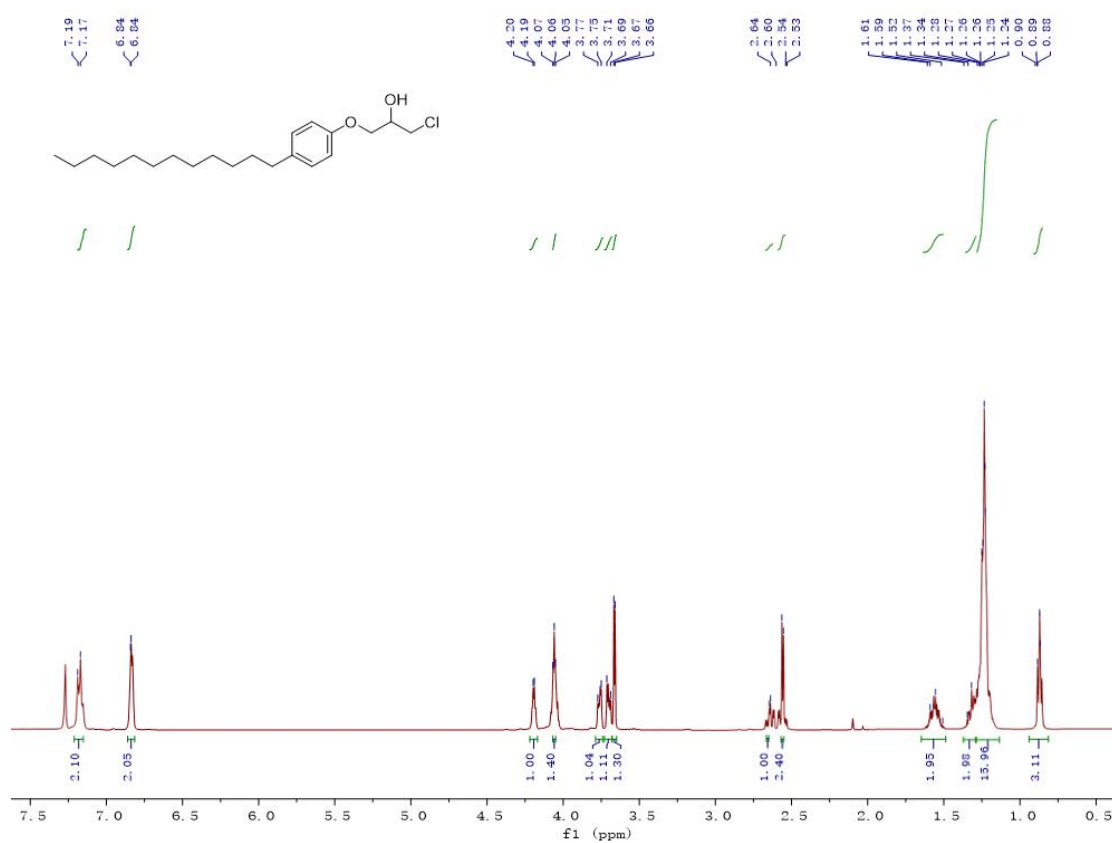


Figure S1. ¹H NMR spectra of 1-chloro-3-(4-dodecylphenoxy)propan-2-ol in CDCl₃.

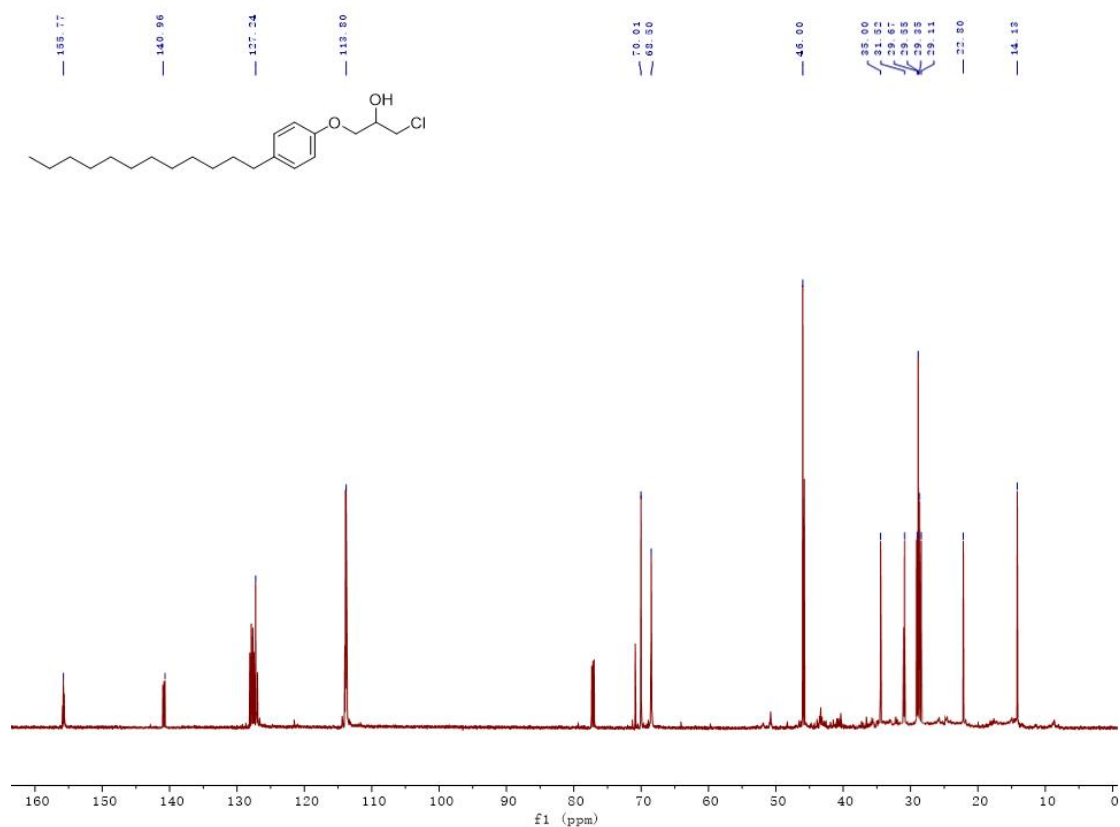


Figure S2. ¹³C NMR spectra of 1-chloro-3-(4-dodecylphenoxy)propan-2-ol in CDCl₃.

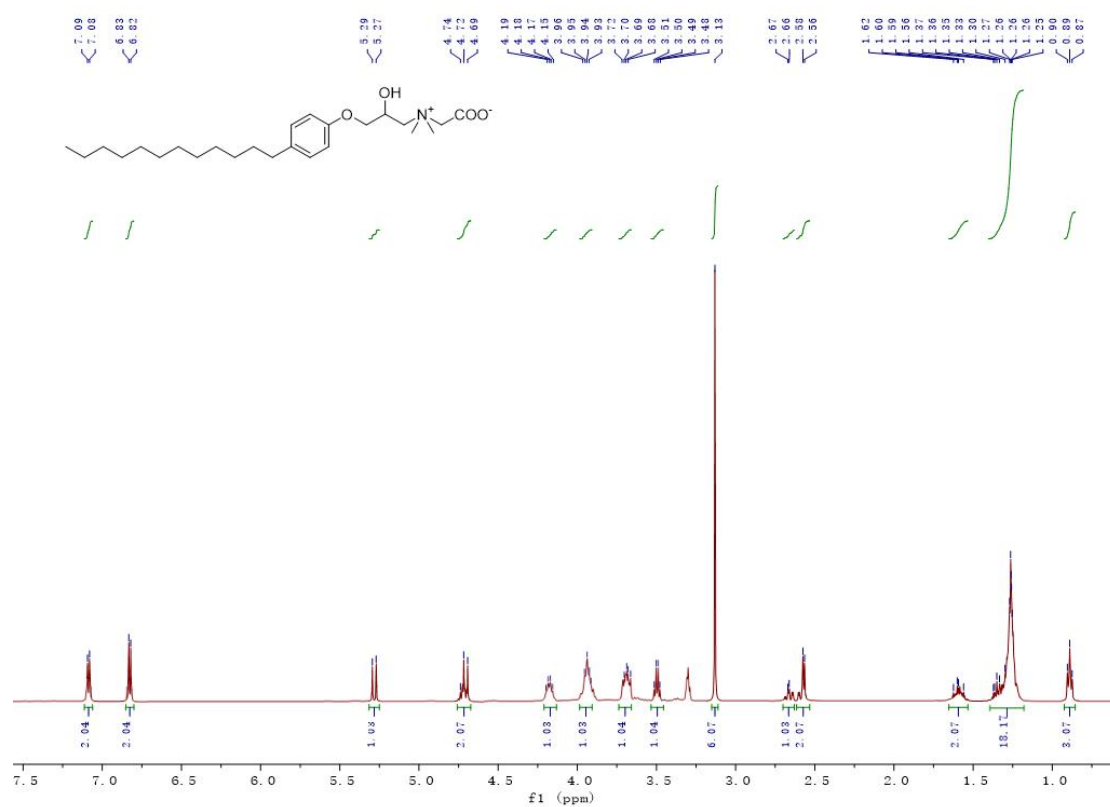


Figure S3. ¹H NMR spectra of 1-((3-(4-dodecylphenoxy)-2-hydroxypropyl)-dimethylammonio)acetate in CD₃OD.

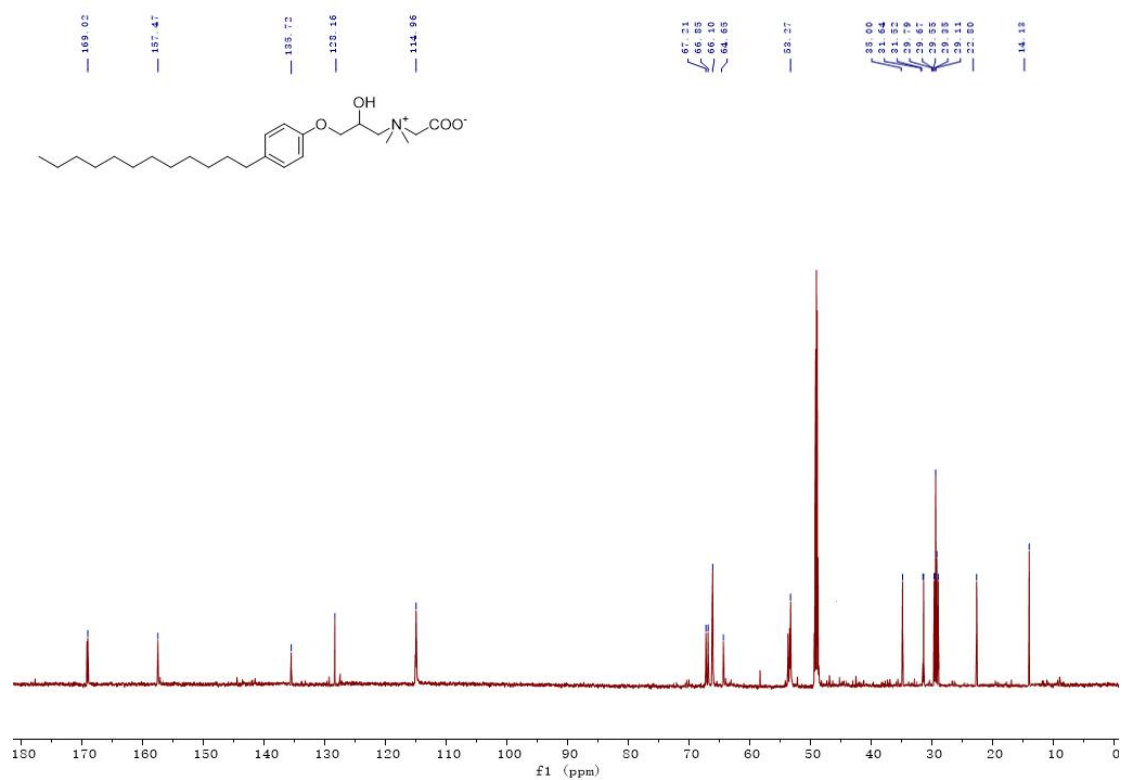


Figure S4. ¹³C NMR spectra of 1-((3-(4-dodecylphenoxy)-2-hydroxypropyl)-dimethylammonio)acetate in CD₃OD

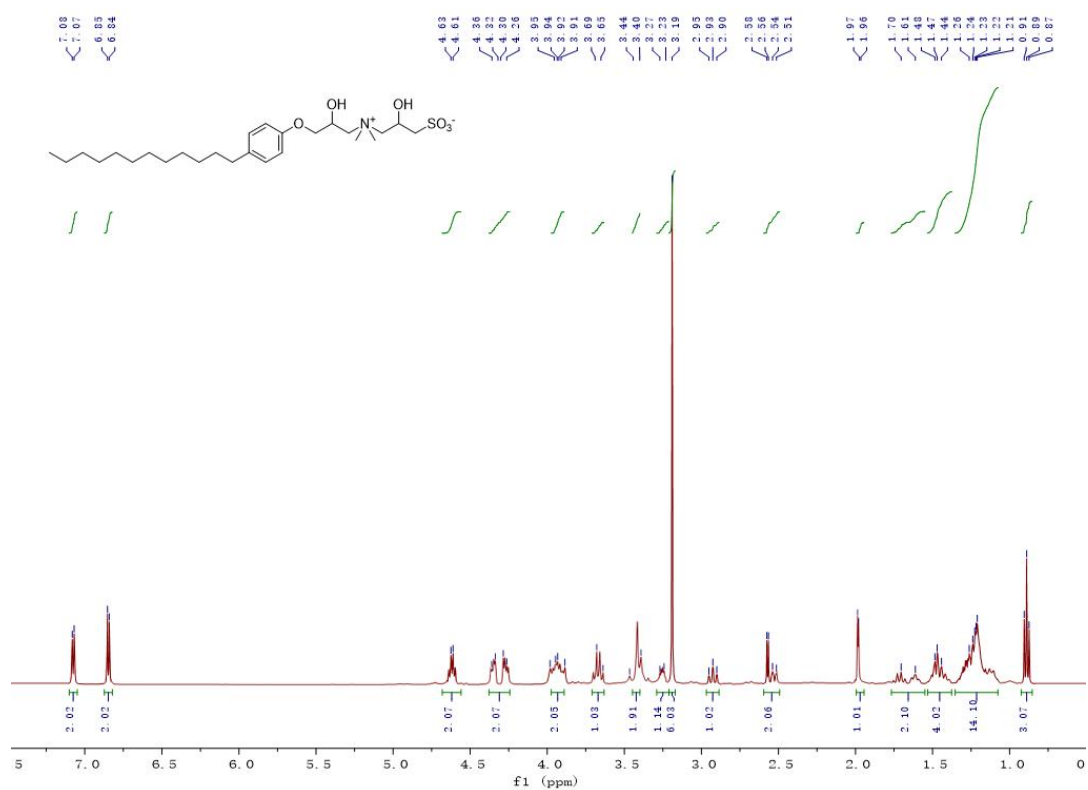


Figure S5. ¹H NMR spectra of 1-((3-(4-dodecylphenoxy)-2-hydroxypropyl)-dimethylammonio)-2-hydroxypropane-1-sulfonate in CD₃OD.

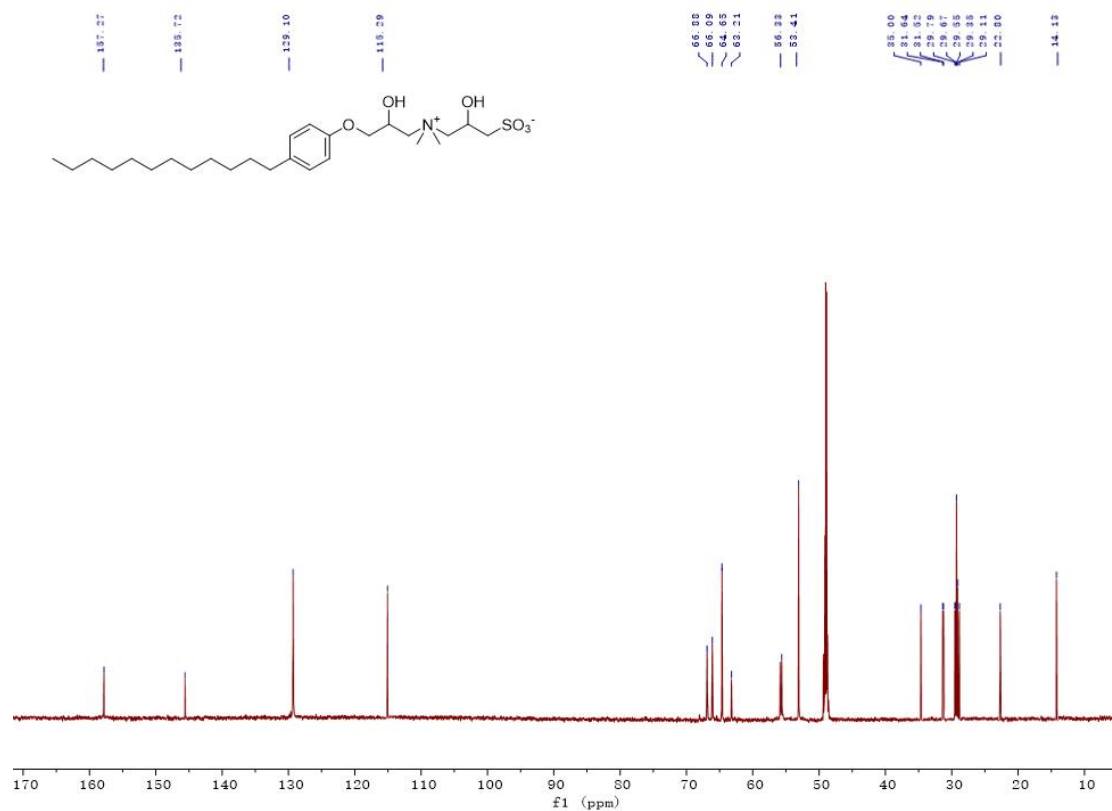


Figure S6. ¹³C NMR spectra of 1-((3-(4-dodecylphenoxy)-2-hydroxypropyl)-dimethylammonio)-2-hydroxypropane-1-sulfonate in CD₃OD.