Electronic Supplementary Material (ESI) for Green Chemistry

Supporting Information for

Synthesis of Renewable Plasticizer Alcohols by Anti-Markovnikov Addition of Water to Terminal Branched Chain Olefins

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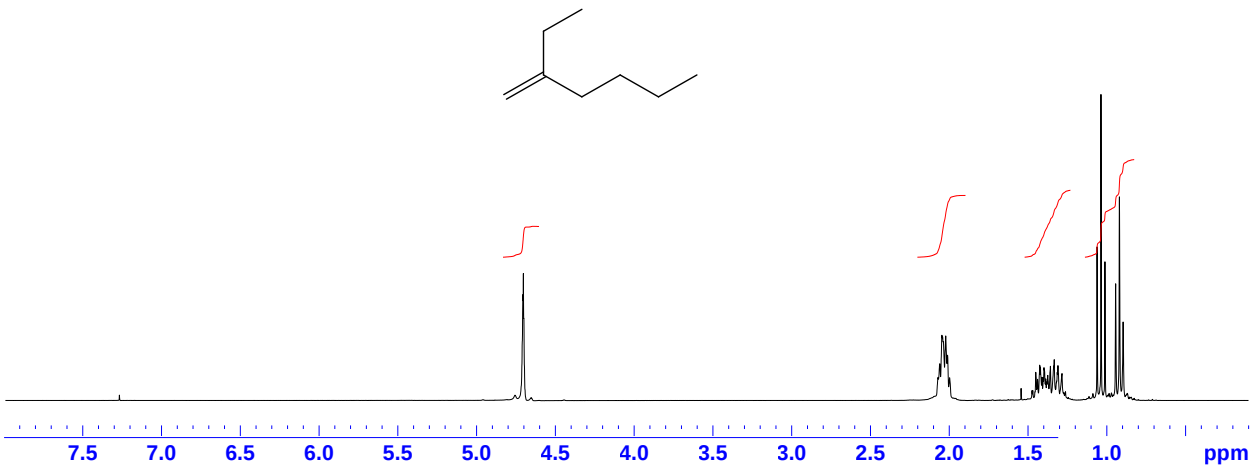

Figure S1. ^{1}H NMR spectrum of 2-ethyl-1-hexene

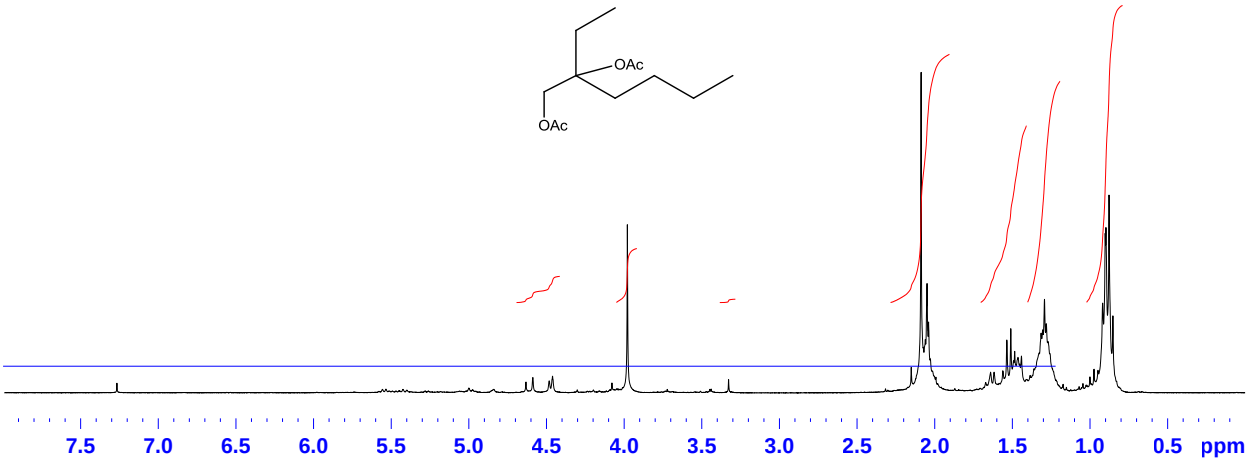

Figure S2. ^{1}H NMR spectrum of 1,2-diaceto-2-ethylhexane prepared by the $NaIO_4$/LiBr method. Peaks at ~4.5 are from the geminal protons on C1 for the primary monoacetate

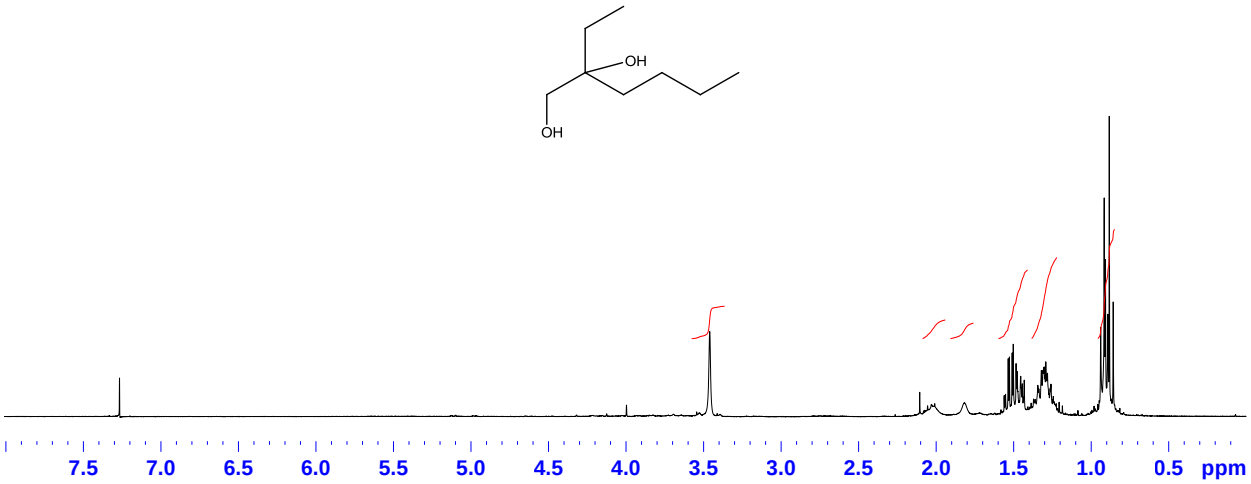

Figure S3. ^{1}H NMR spectrum of 2-ethylhexane-1,2-diol

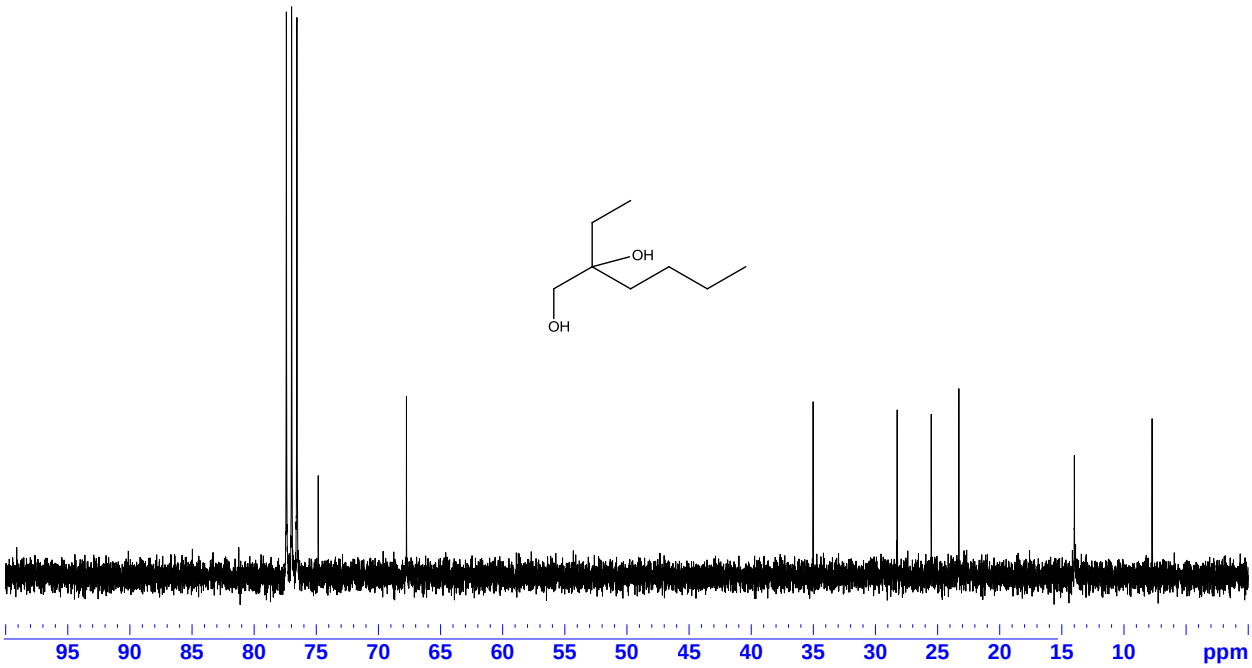

Figure S4. ^{13}C NMR spectrum of 2-ethylhexane-1,2-diol

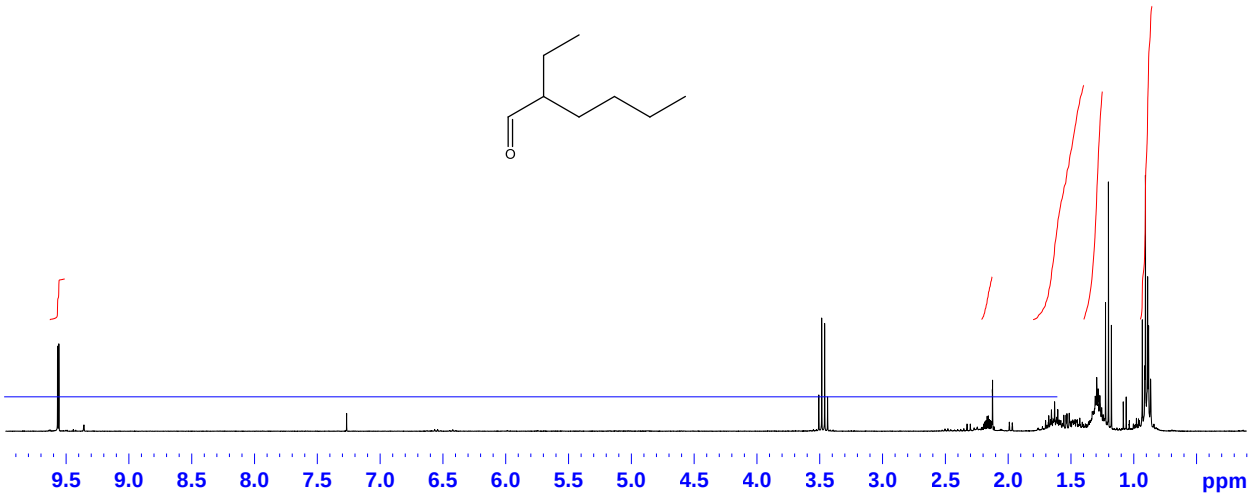

Figure S5. ^{1}H NMR spectrum of 2-ethylhexanal (peaks at δ 3.48 and 1.21 are due to residual diethyl ether)

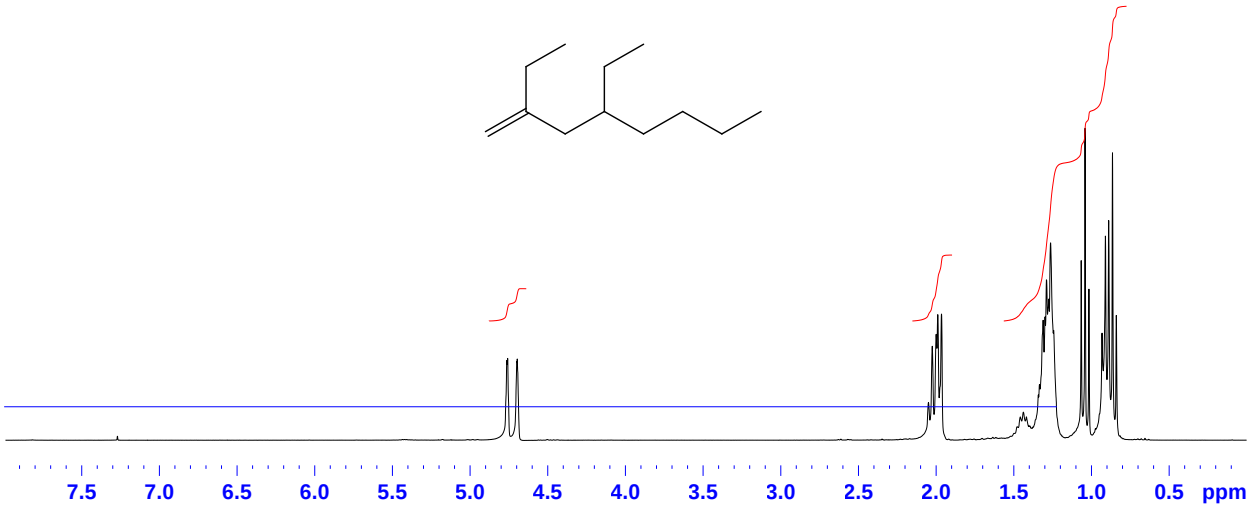

Figure S6. ^{1}H NMR spectrum of 5-ethyl-3-methylenenonane

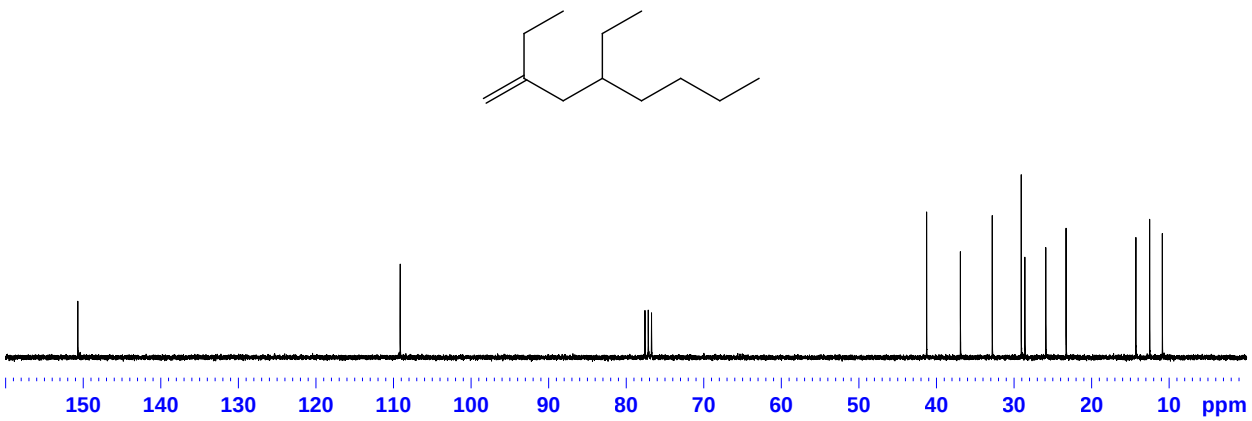

Figure S7. ^{13}C NMR spectrum of 5-ethyl-3-methylenenonane

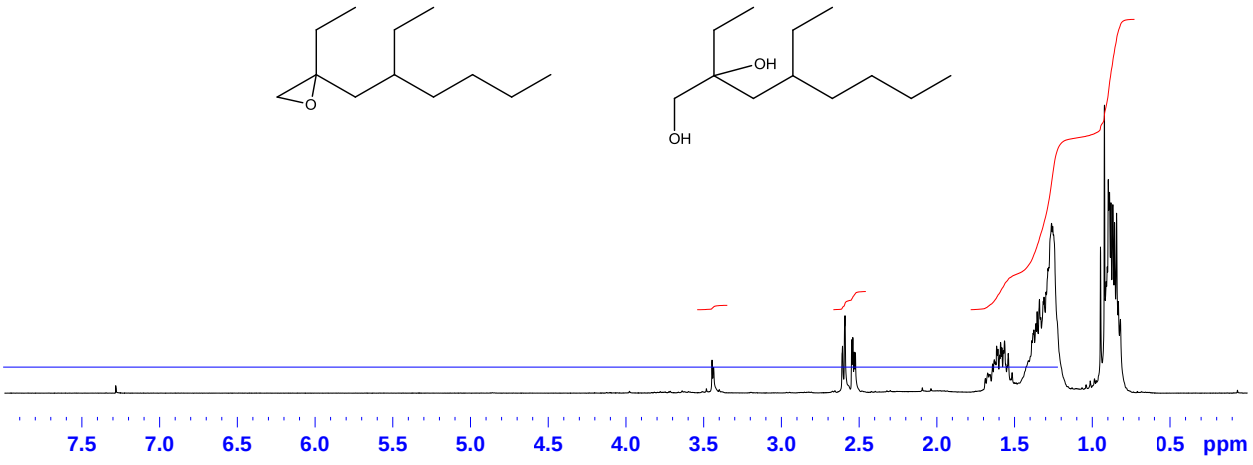

Figure S8. ^{1}H NMR spectrum of 2-ethyl-2-(2-ethylhexyl)oxirane/2,4-diethyloctane-1,2-diol. The singlet at 3.4 ppm is from the C1 geminal hydrogens of the diol, while the two doublets at 2.55 ppm are the C1 geminal hydrogens from the epoxide

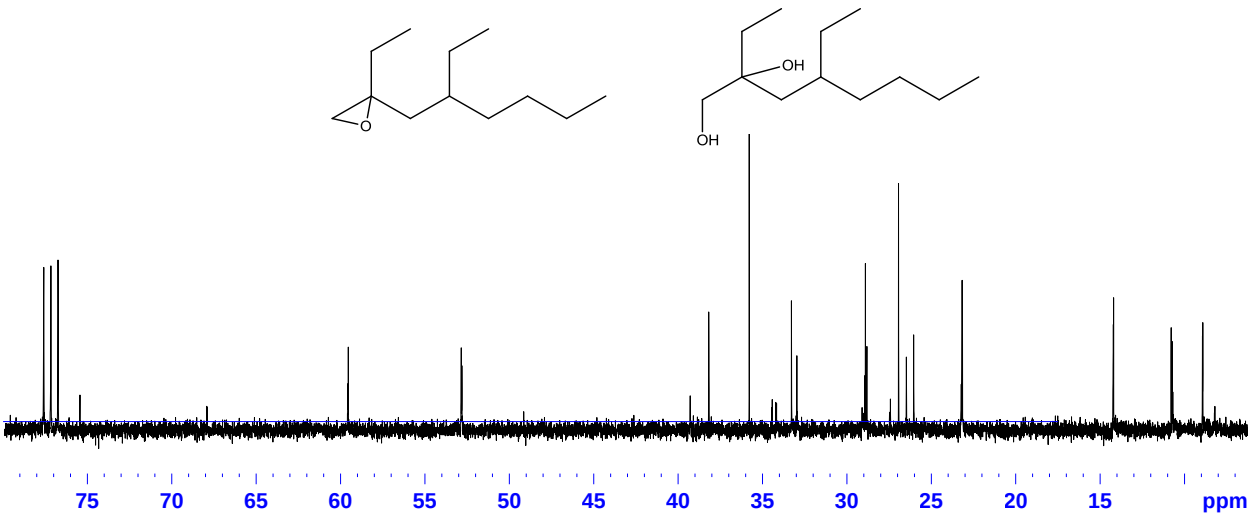

Figure S9. ^{13}C NMR spectrum of 2-ethyl-2-(2-ethylhexyl)oxirane/2,4-diethyloctane-1,2-diol

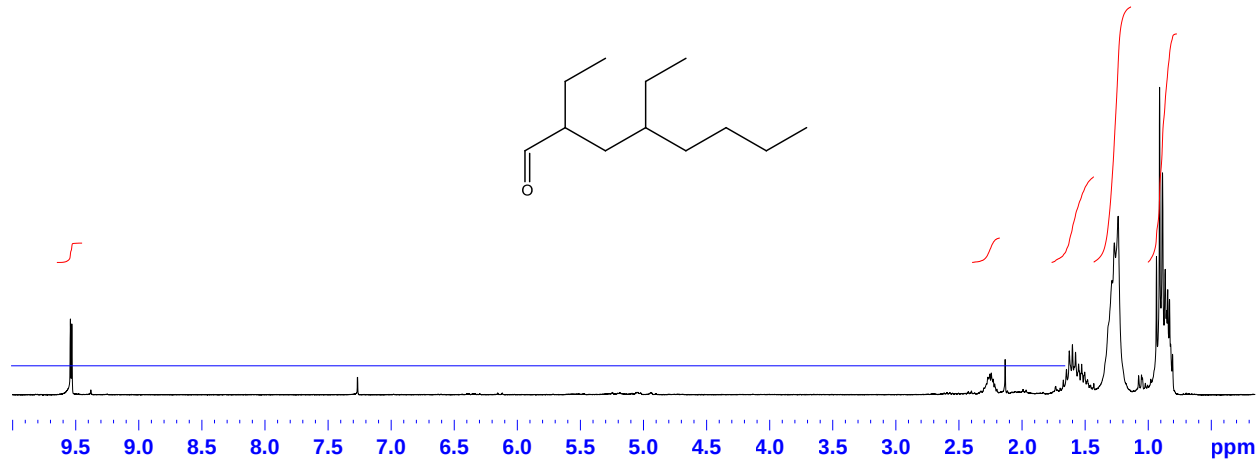

Figure S10. ^{1}H NMR spectrum of 2,4-diethyloctanal

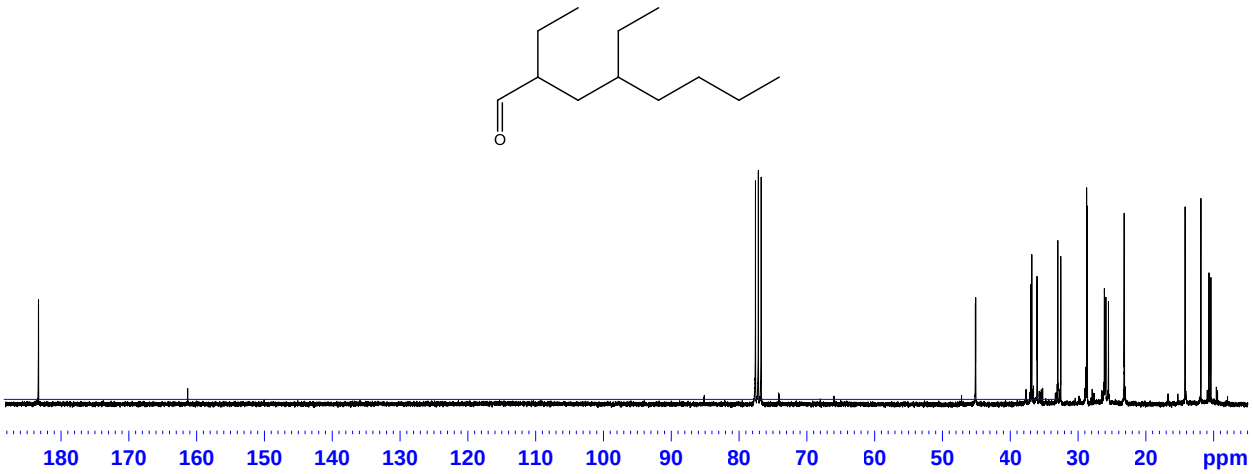

Figure S11. ^{13}C NMR spectrum of 2,4-diethyloctanal

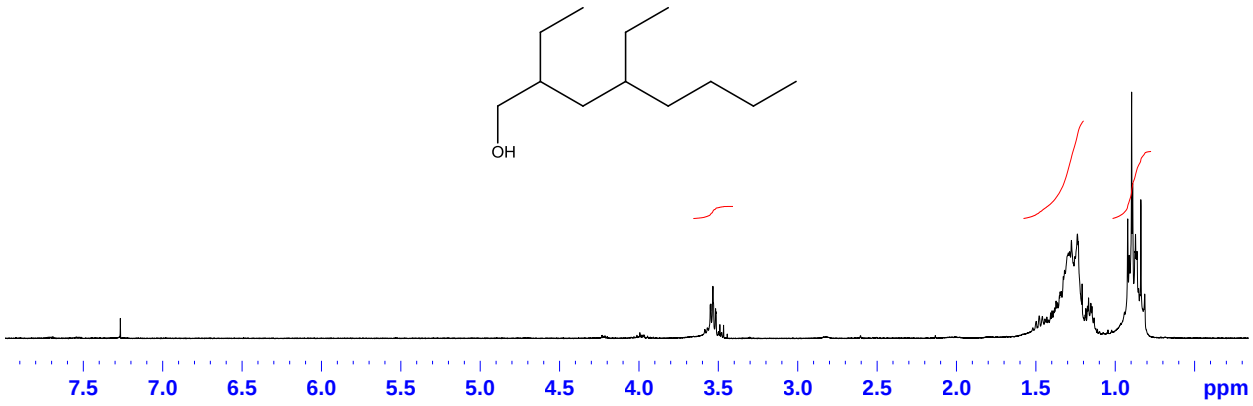

Figure S12. ^{1}H NMR spectrum of 2,4-diethyloctanol

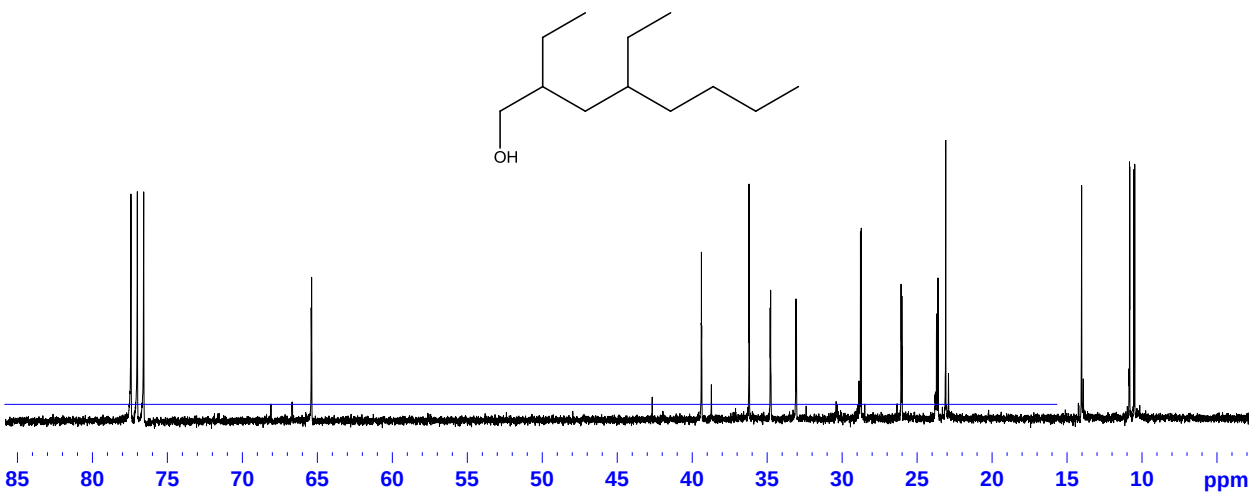

Figure S13. ^{13}C NMR spectrum of 2,4-diethyloctanol