

Supporting Information

Environmentally Benign Synthesis of Vinyl Ester Resin from Biowaste Glycerin

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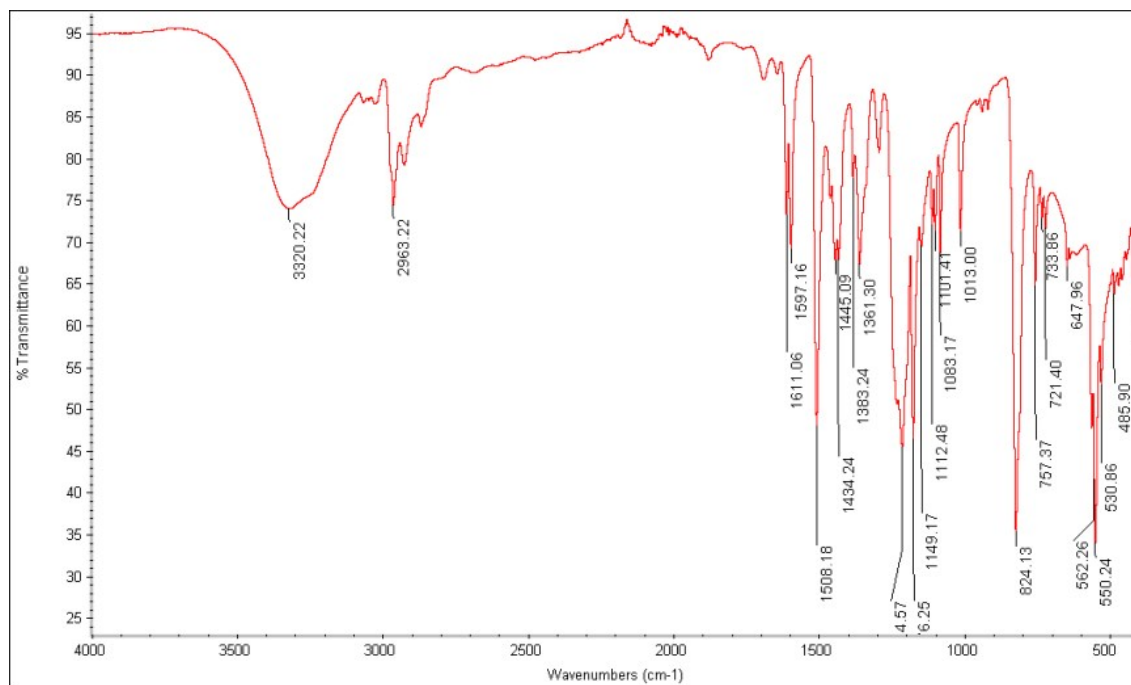


Figure S1: FT-IR of column separated Bisphenol A (BPA).

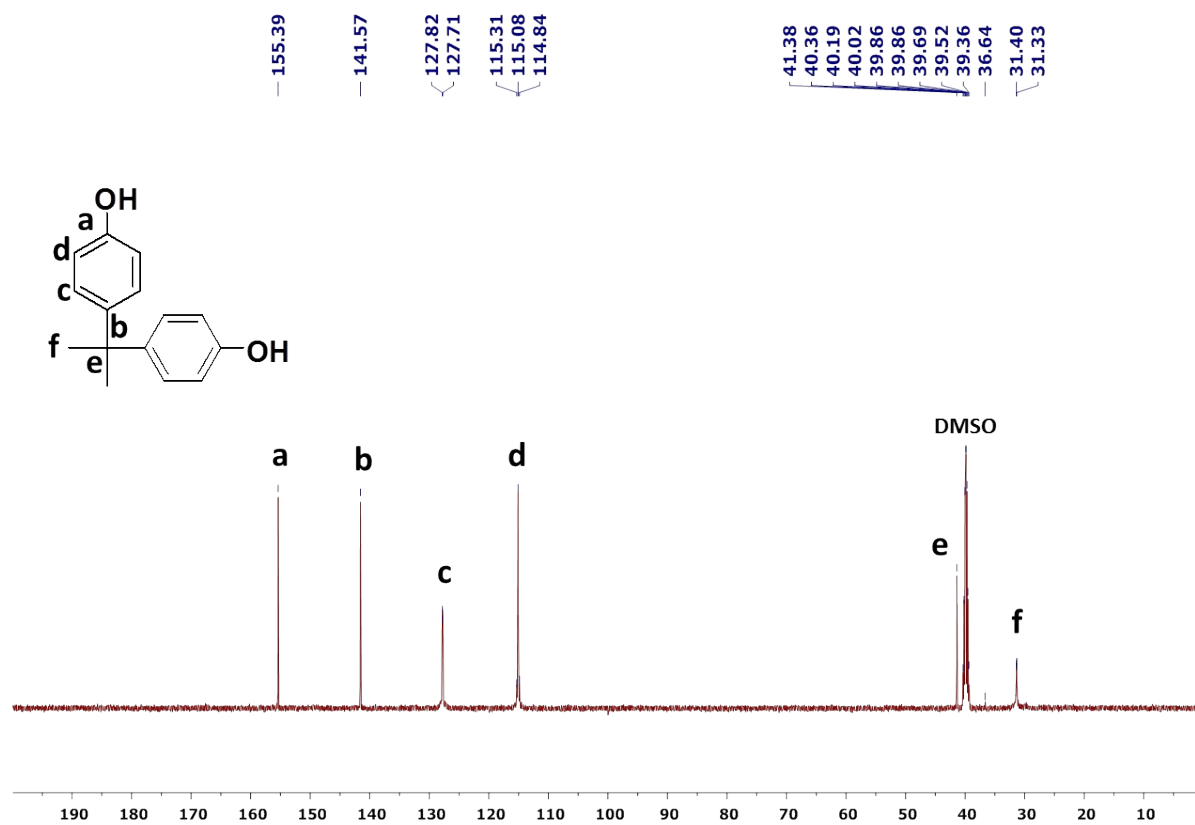


Figure S2: ¹³C NMR of column separated BPA.

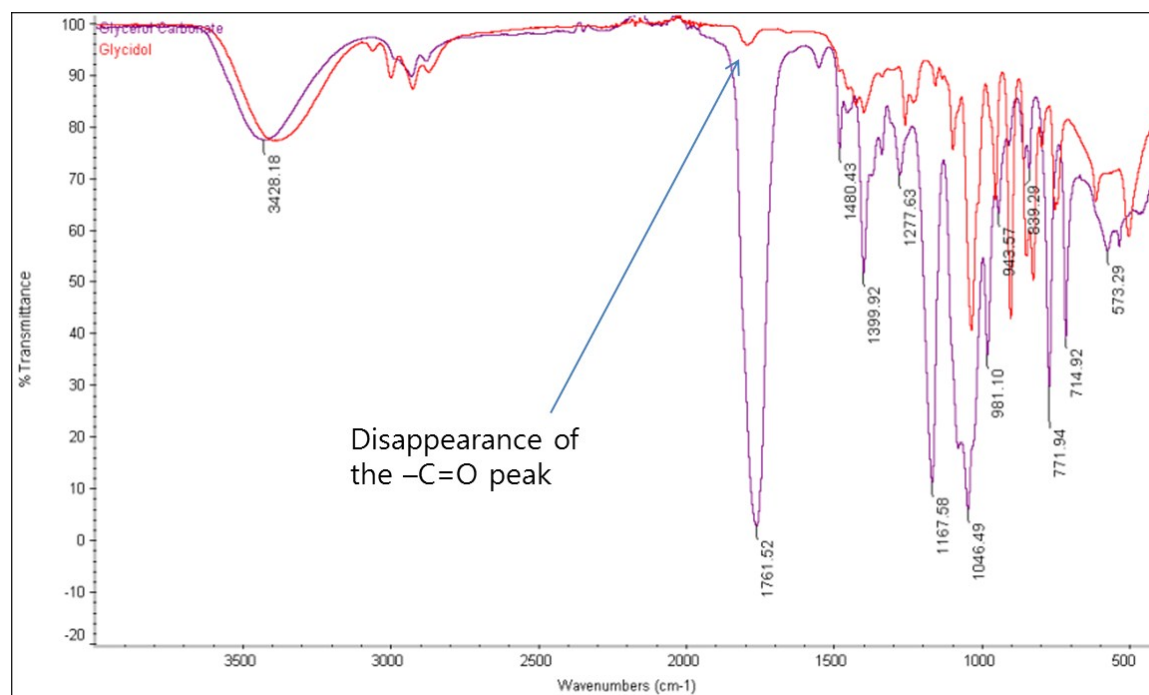


Figure S3: FTIR of glycerol carbonate and glycidol. (Purple: Glycerol Carbonate, Red: Glycerin)

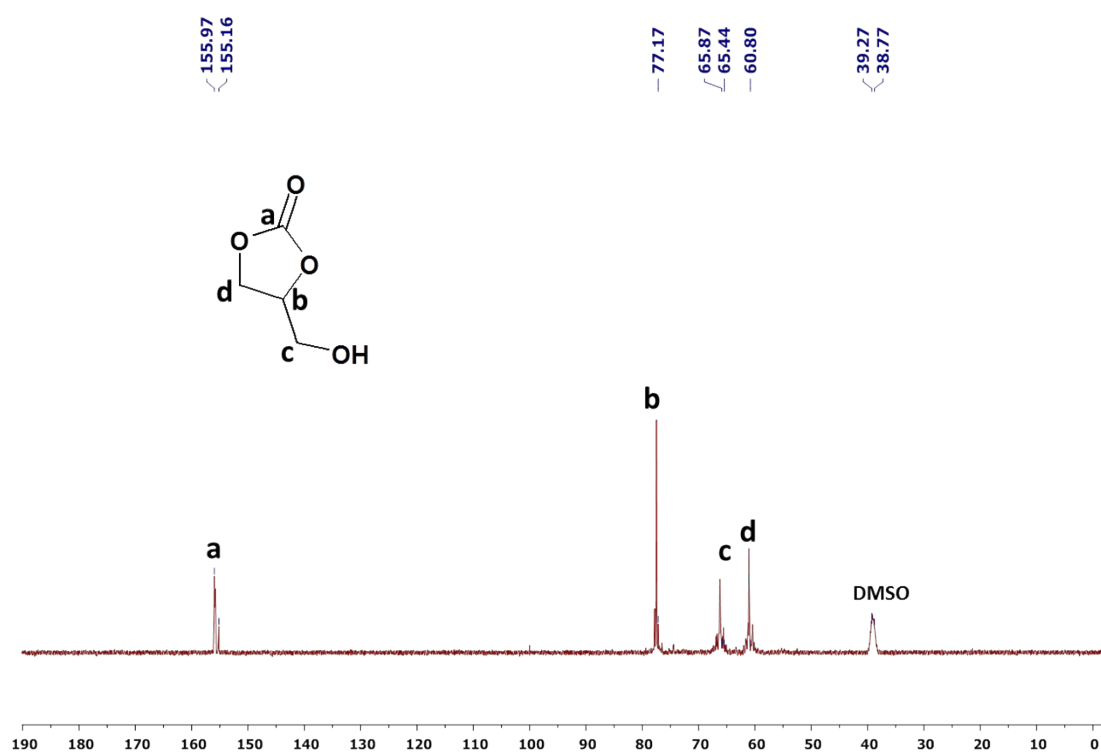


Figure S4: ^{13}C NMR of glycerol carbonate.

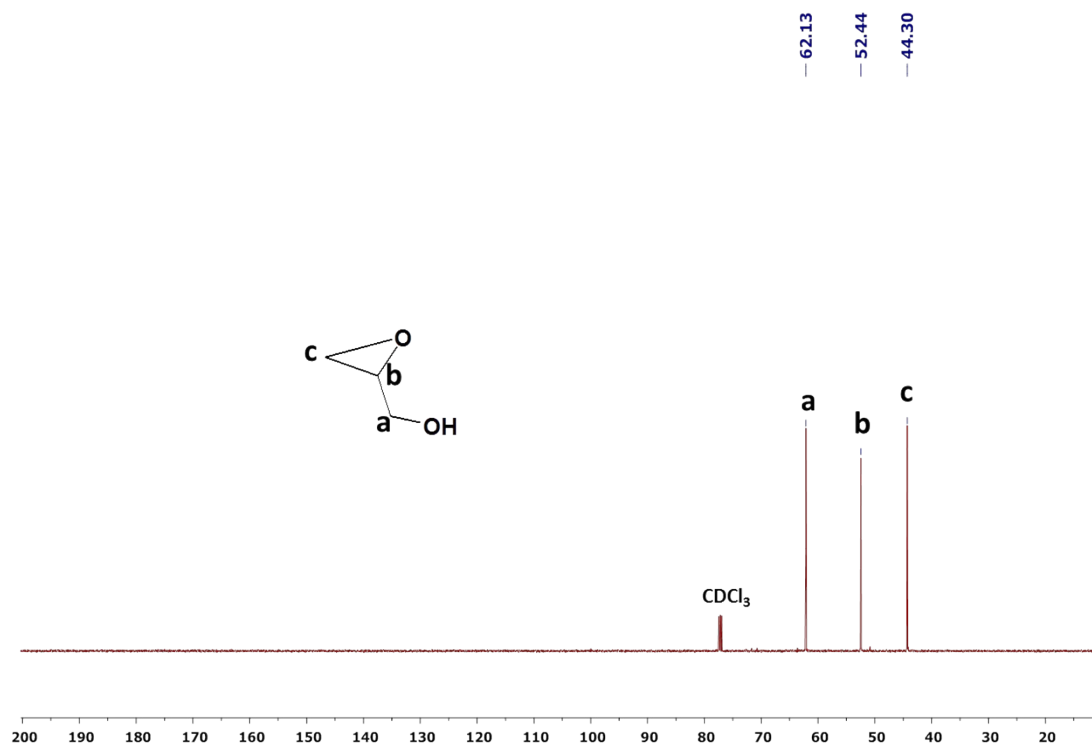


Figure S5: ^{13}C NMR of glycidol.

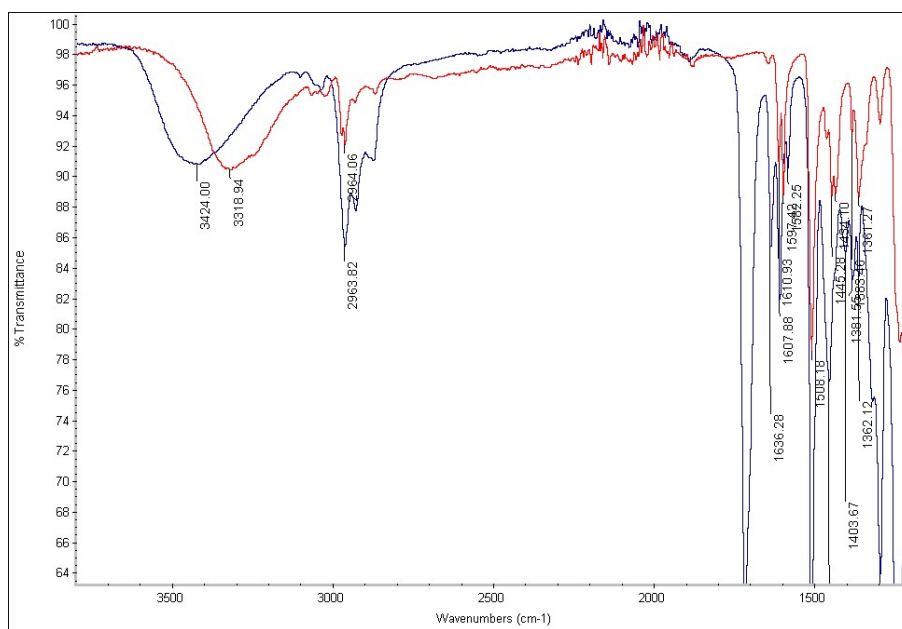


Figure S6: FT-IR and image of vinyl ester monomer synthesized using bisphenol A. (Blue: Vinyl Ester Resin, Red: Bisphenol A)

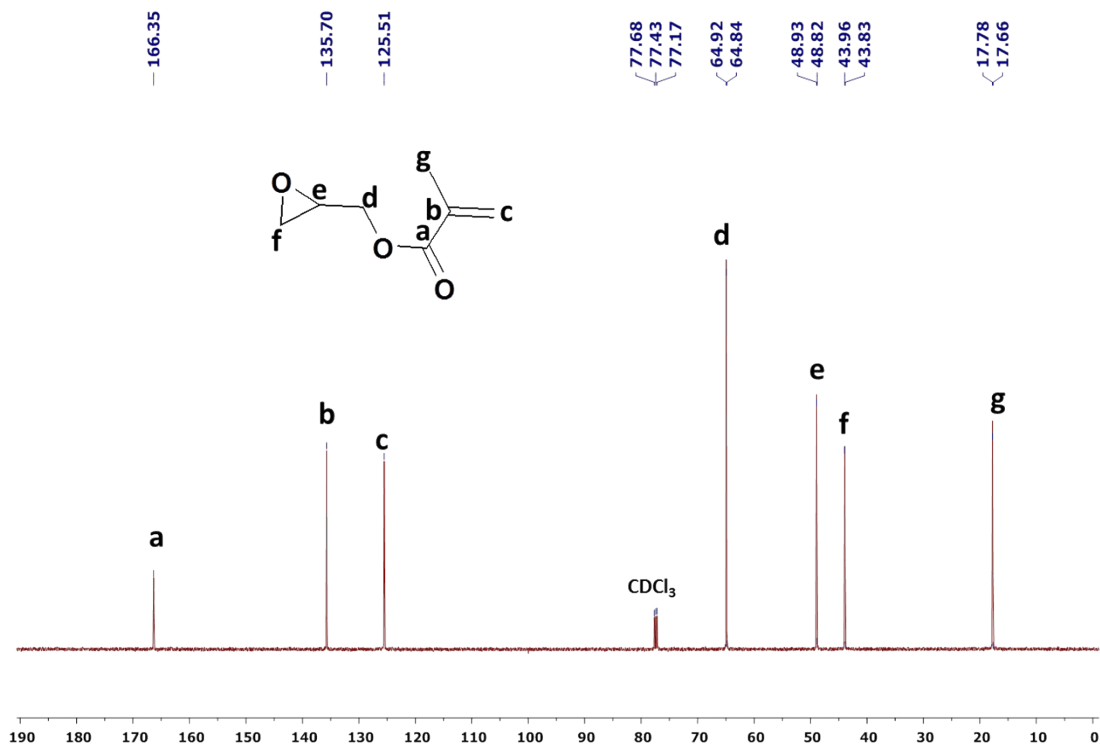


Figure S7: ¹³C NMR of Glycidyl Methacrylate.

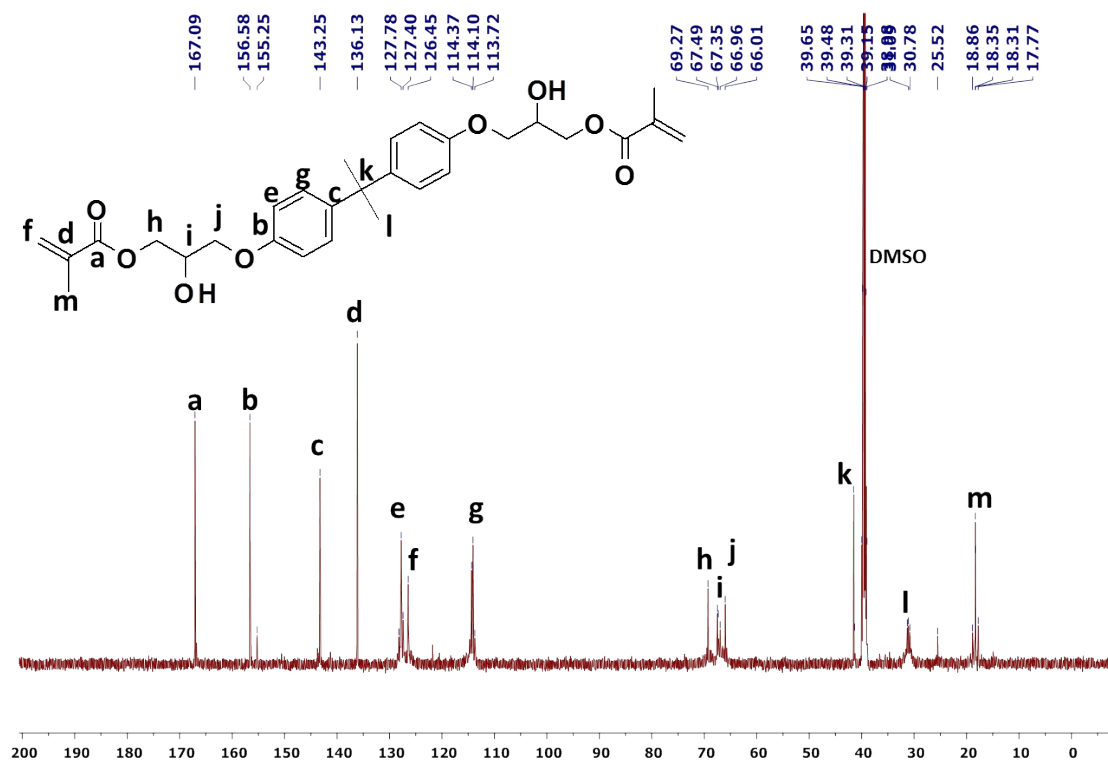


Figure S8: ¹³C NMR of Vinyl Ester Resin.

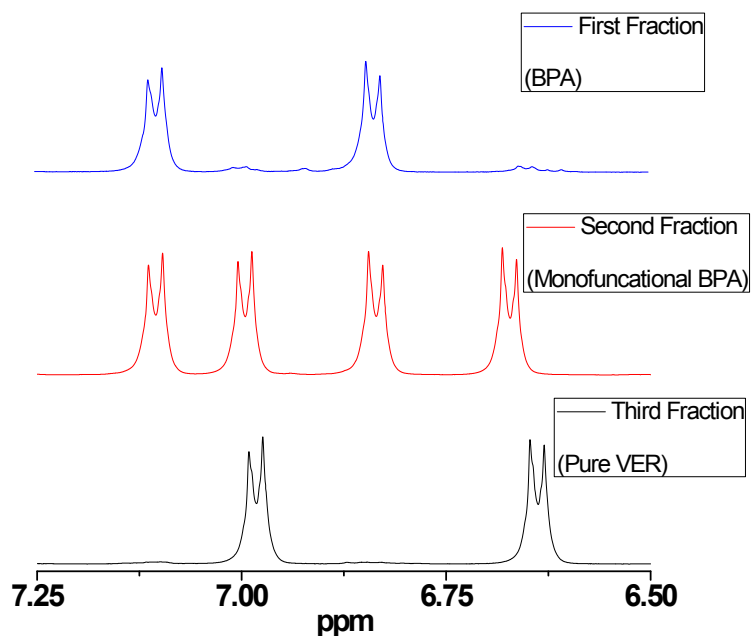


Figure S9: Enlarged ^1H NMR of Vinyl Ester Resin between 7.25-6.50 ppm.

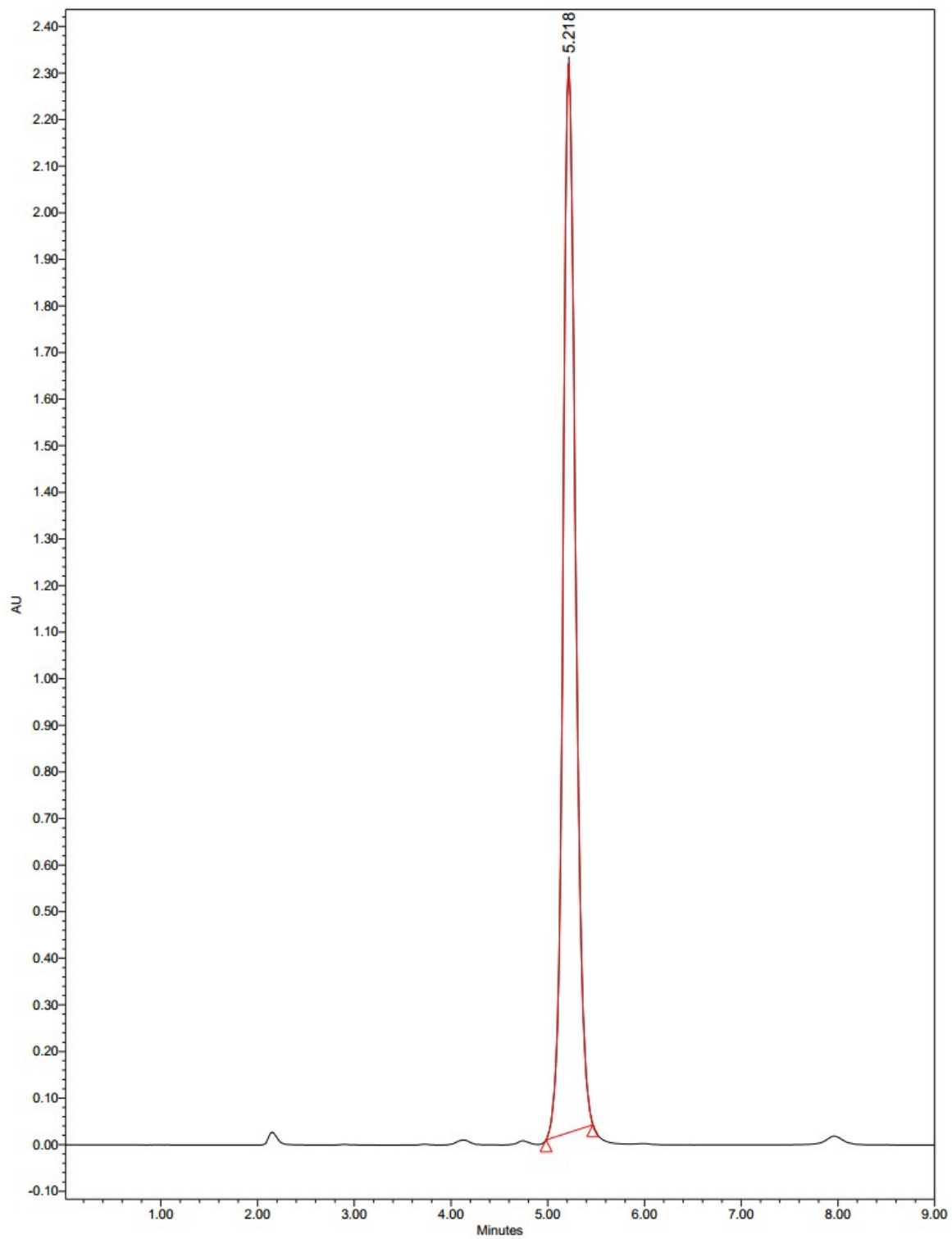


Figure S10. Chromatogram of a first fraction isolated during column purification of the VER-monomer.

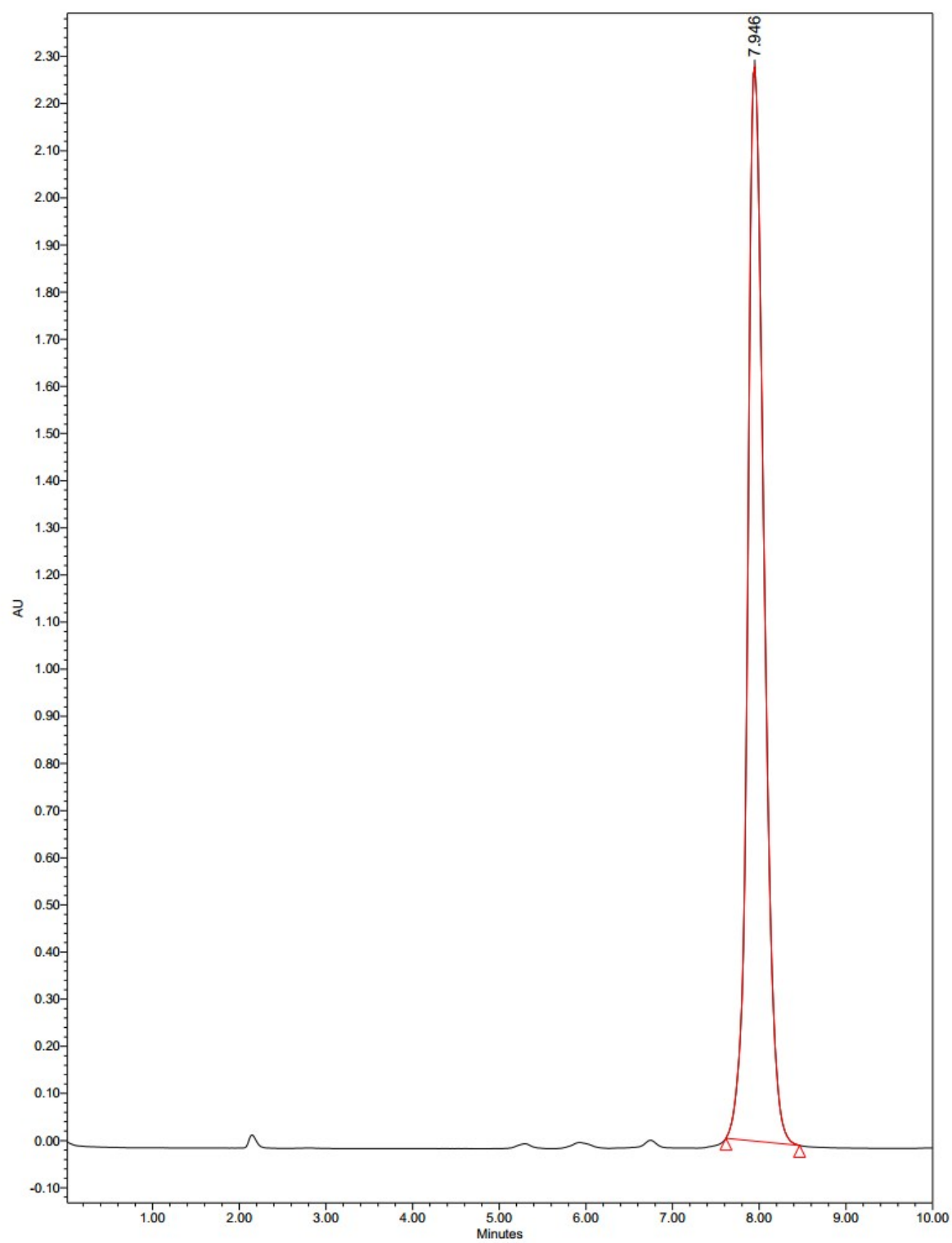


Figure S11. Chromatogram of a second fraction isolated during column purification of the VER-monomer.

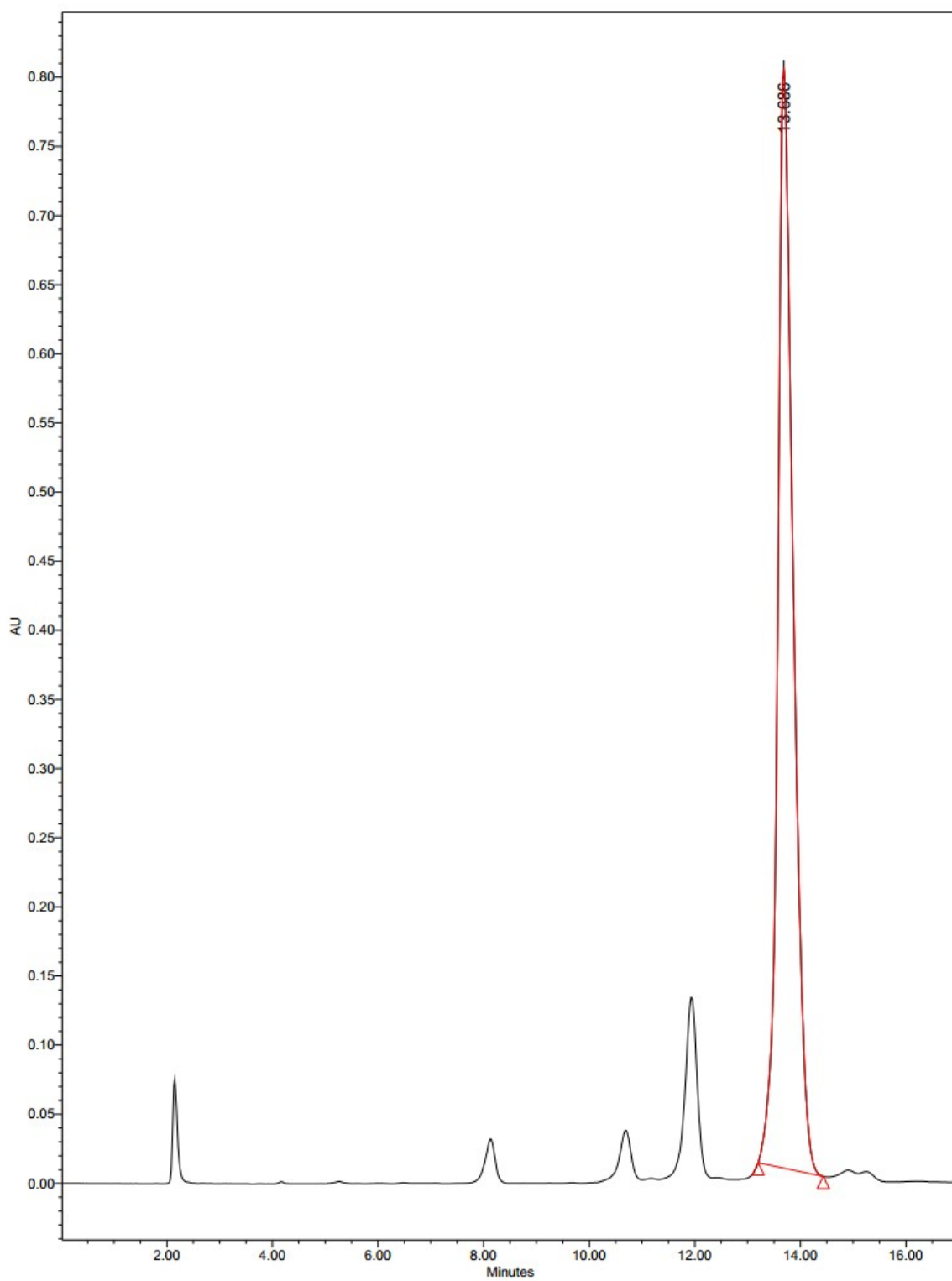


Figure S12. Chromatogram of a third fraction isolated during column purification of the VER-monomer.