

Supplementary Information

Simultaneous Determination of 2,3,7,8-TCDD and 2,3,7,8-TCDF in Water Samples by LLE-LTP and HPLC-DAD

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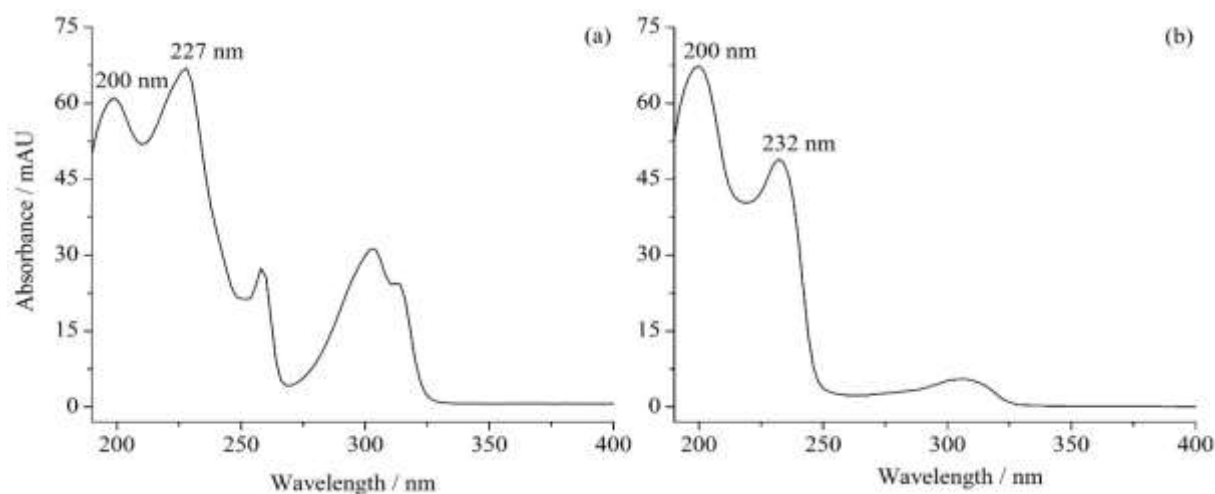


Figure S1. Absorption spectra in the ultraviolet region of the 2,3,7,8-TCDF (a) and 2,3,7,8-TCDD (b) standard solution in hexane at a concentration of 0.5 mg L^{-1} .

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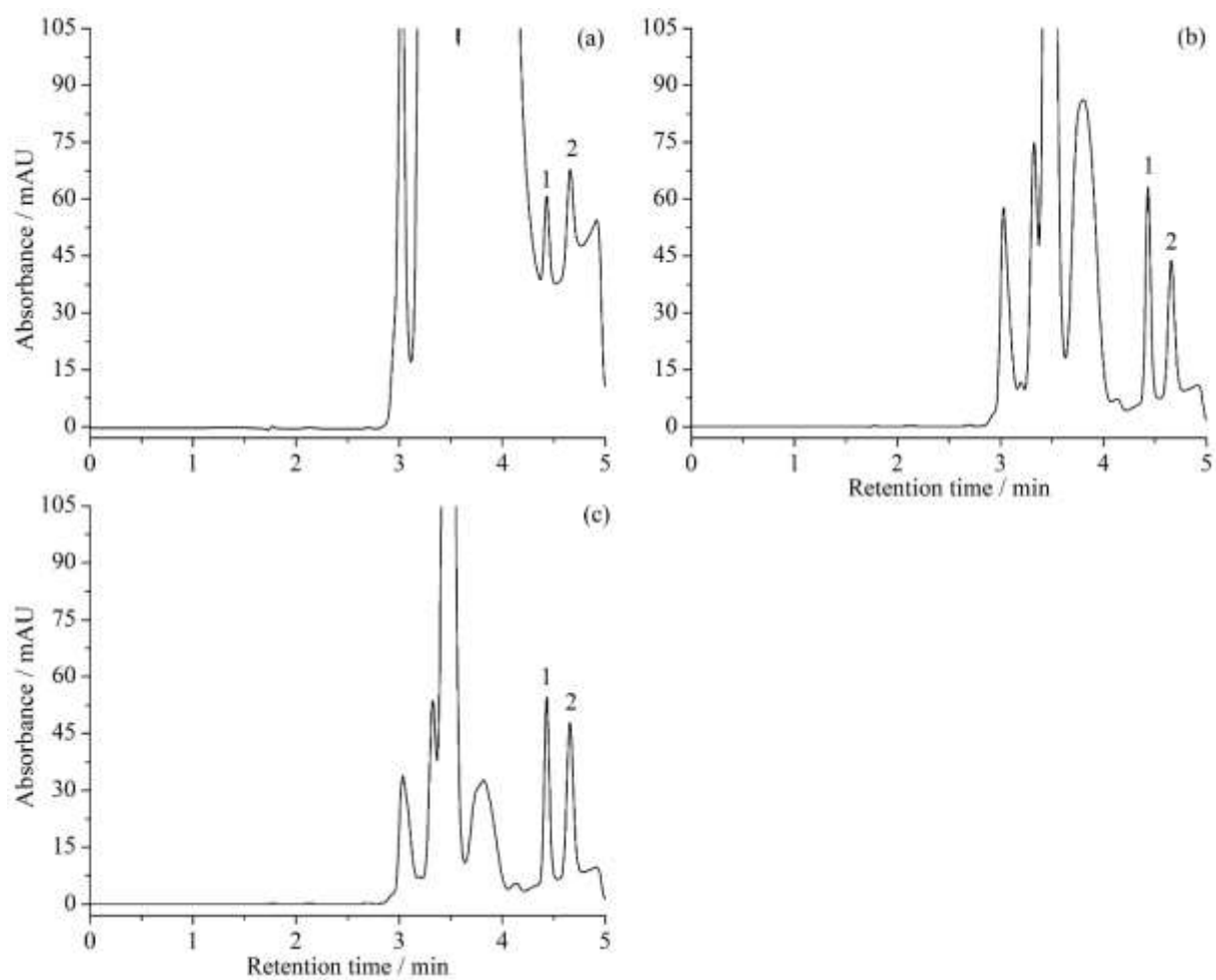


Figure S2. Chromatograms of the 2,3,7,8-TCDF (compound **1**) and 2,3,7,8-TCDD (compound **2**) standard solution in hexane at concentration of 0.5 mg L^{-1} . Chromatographic conditions: Kinetex column, mobile phase ACN:H₂O = 100:0, flow rate = 0.5 mL min^{-1} , $T = 30 \text{ }^\circ\text{C}$ and (a) $\lambda = 200$; (b) $\lambda = 227$; and (c) $\lambda = 232 \text{ nm}$.

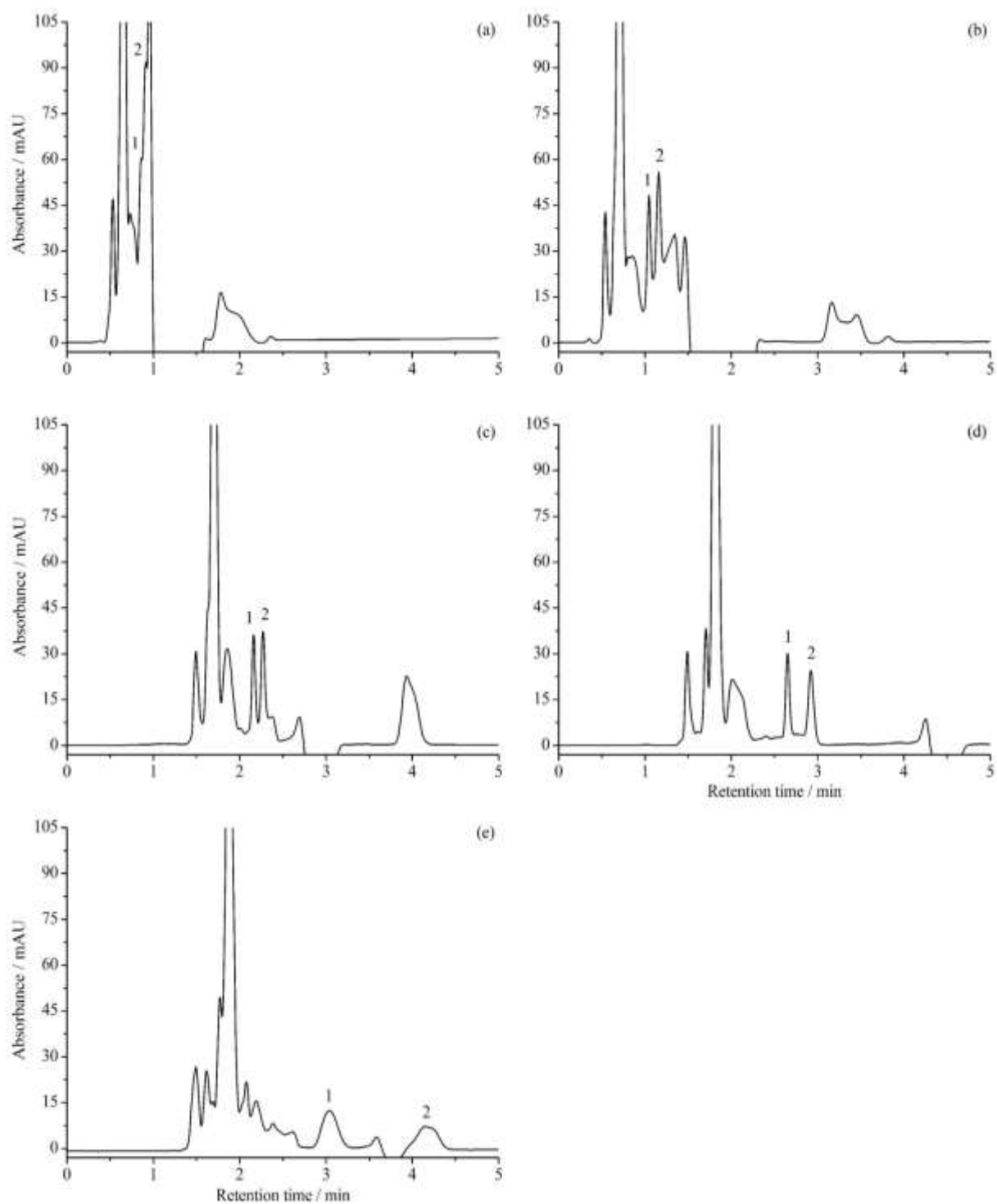


Figure S3. Chromatograms of the 2,3,7,8-TCDF (compound **1**) and 2,3,7,8-TCDD (compound **2**) standard solution in hexane at concentration of 0.5 mg L^{-1} . Poroshell column, flow rate = 1 mL min^{-1} , $T = 30 \text{ }^\circ\text{C}$ and $\lambda = 232 \text{ nm}$: (a) ACN:H₂O = 100:0 and (b) ACN:H₂O = 95:05; and Kinetex column, flow rate = 1 mL min^{-1} , $T = 30 \text{ }^\circ\text{C}$ and $\lambda = 232 \text{ nm}$: (c) ACN:H₂O = 100:0; (d) ACN:H₂O = 95:05 and (e) MET:H₂O = 95:05.

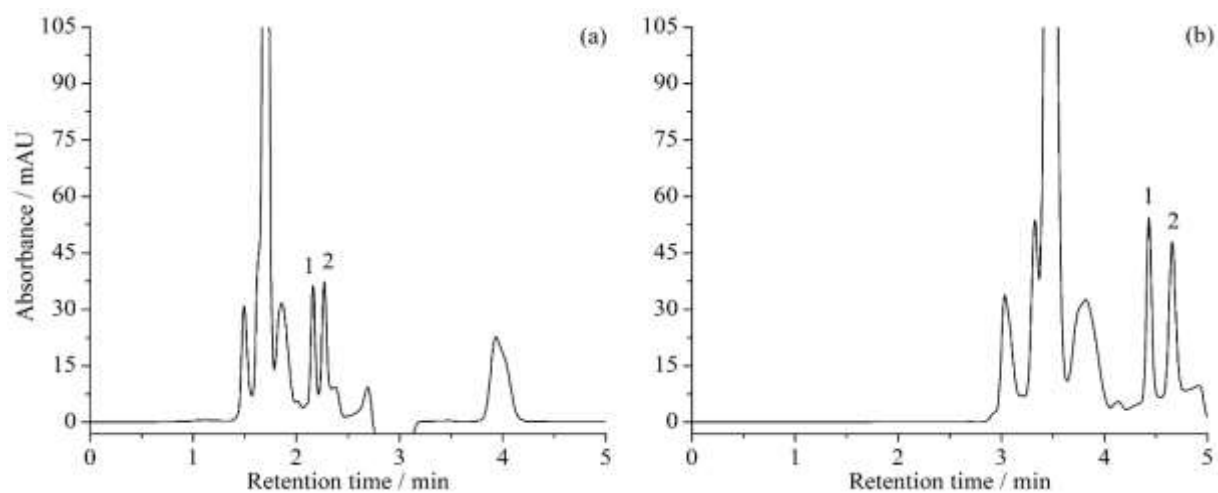


Figure S4. Chromatograms of the 2,3,7,8-TCDF (compound **1**) and 2,3,7,8-TCDD (compound **2**) standard solution in hexane at concentration of 0.5 mg L^{-1} . Kinetex column, mobile phase ACN:H₂O = 100:0, T = 30 °C, $\lambda = 232 \text{ nm}$, flow rate = 1 (a) and 0.5 mL min^{-1} (b).

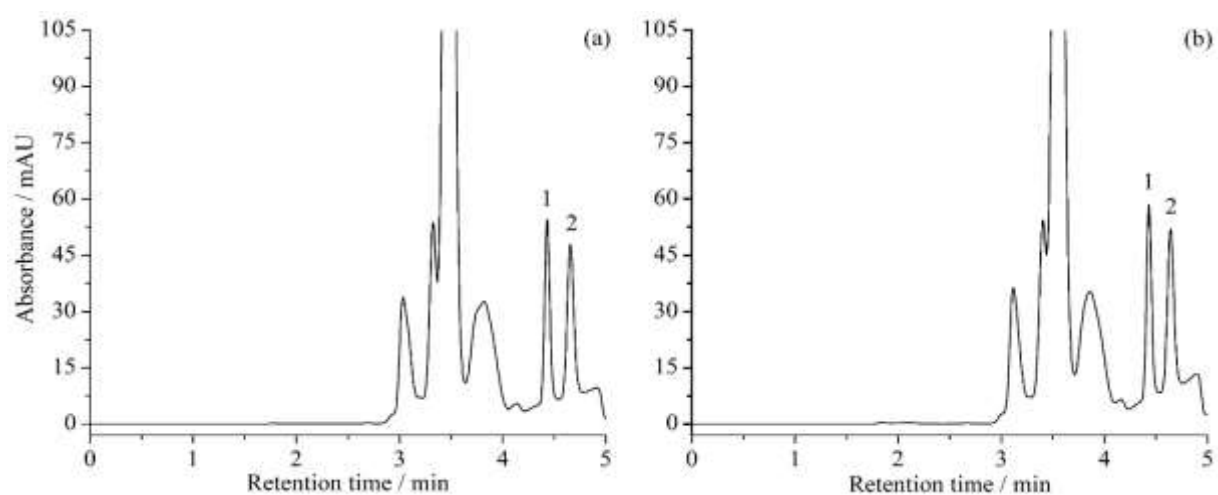


Figure S5. Chromatograms of the 2,3,7,8-TCDF (compound **1**) and 2,3,7,8-TCDD (compound **2**) standard solution in hexane at concentration of 0.5 mg L^{-1} . Kinetex column, mobile phase ACN:H₂O = 100:0, flow rate = 0.5 mL min^{-1} , $\lambda = 232 \text{ nm}$, T = 30 (a) and 35 °C (b).

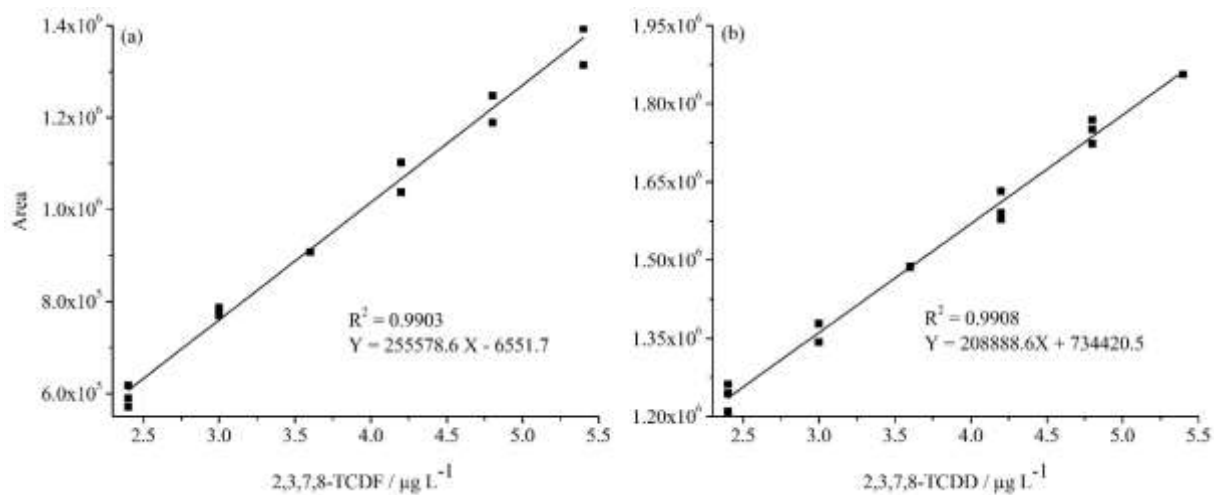


Figure S6. Analytical curves for (a) 2,3,7,8-TCDF and (b) 2,3,7,8-TCDD. R^2 : determination coefficient.