

List of Supporting Information

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Table S1. The hydrogen-bond donor capability values (α) of different solvents.

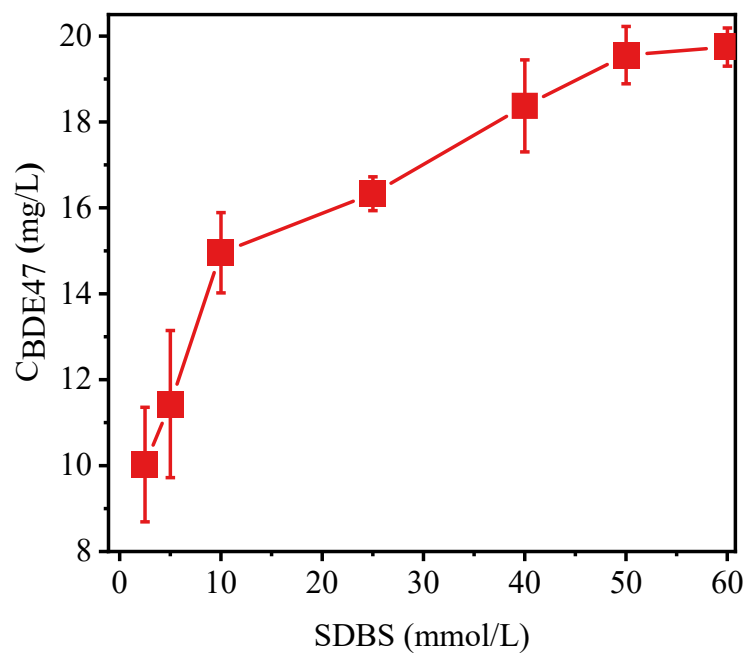


Fig. S1. Solubilization effect of SDBS on BDE47 in water.

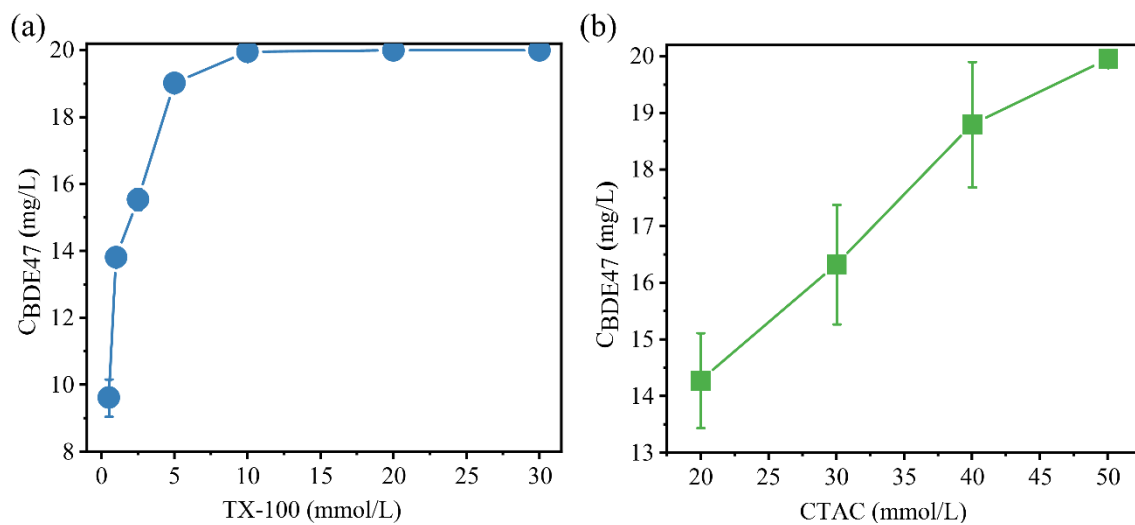


Fig. S2. Solubilization effects of (a) TX-100 and (b) CTAC on BDE47 in water.

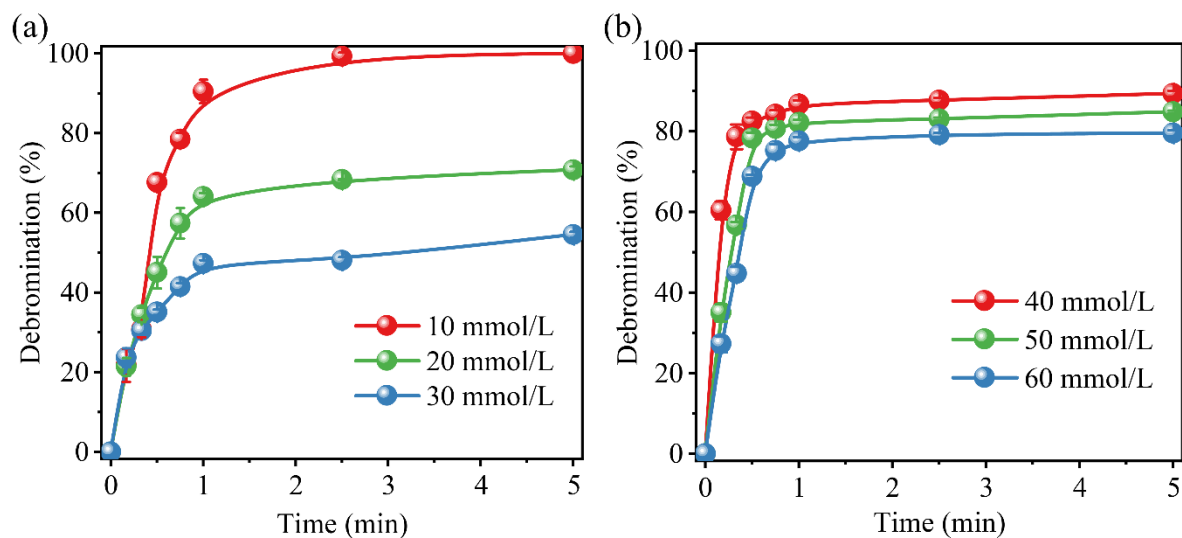


Fig. S3. Effects of (a) TX-100 concentration and (b) CTAC concentration on BDE47 debromination efficiency.

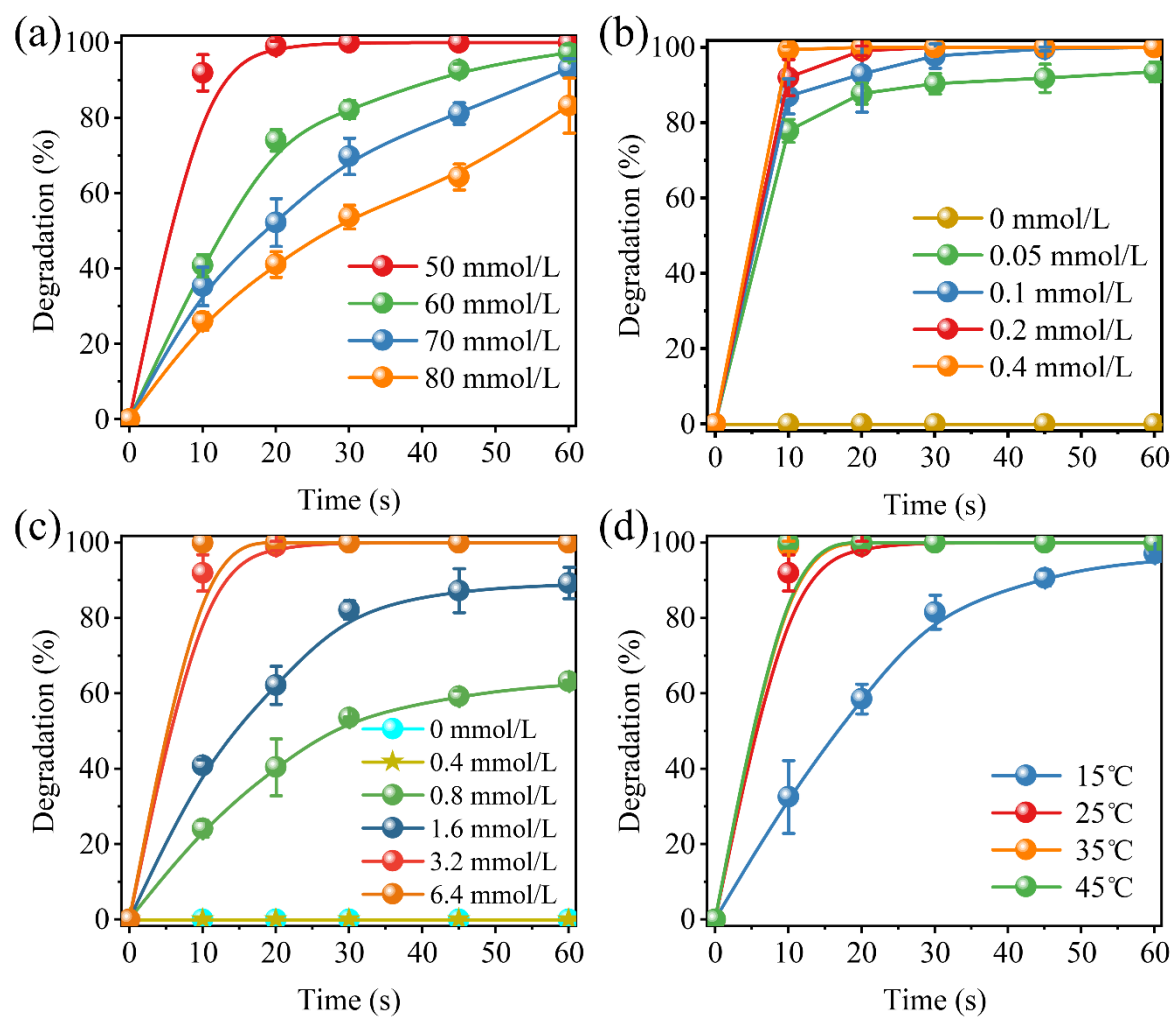


Fig. S4. Effects of (a) SDBS concentration, (b) Pd^{2+} concentration, (c) $\text{N}_2\text{H}_4 \cdot \text{H}_2\text{O}$ consumption, and (d) reaction temperature on BDE47 degradation efficiency.

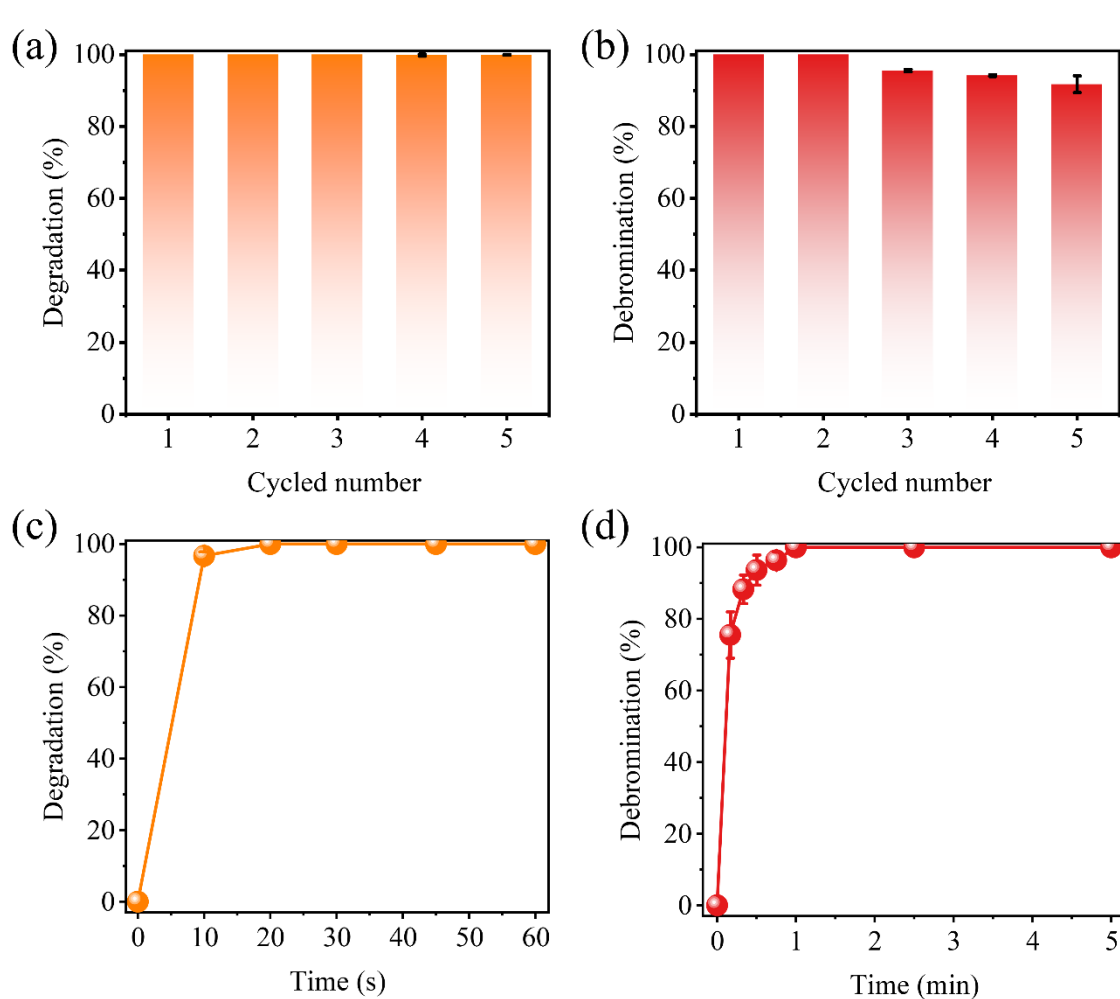


Fig. S5. (a) Degradation efficiency of recycled Pd catalyst for BDE47 and (b) debromination efficiency; (c) Degradation efficiency and (d) debromination efficiency of BDE47 extracted from simulated samples in the “ $\text{Pd}^{2+} + \text{N}_2\text{H}_4 \cdot \text{H}_2\text{O}$ ” system.

Table S1 The hydrogen-bond donor capability values (α) of different solvents.

Solvent	α Value
Water	1.17
Methanol	0.98
Ethanol	0.86
n-propanol	0.84
n-butanol	0.79
Acetonitrile	0.19
Tetrahydrofuran	0
n-hexane	0