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Supporting Information

Development of CO₂ phase change absorbents by means of cosolvent effect

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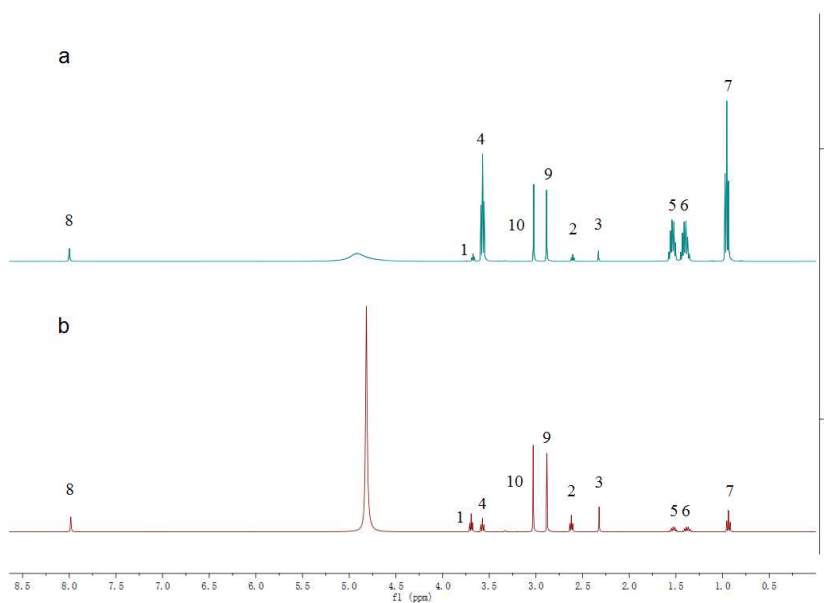
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14 **1 Distributions of alcohol and CO₂ in two phases**

15 MDEA/1-butanol/H₂O CPCAs, ¹H NMR analysis was performed. The hydrogen
 16 atoms in different positions were identified as shown in Table S1. The ¹H NMR
 17 spectrum of the CPCA after CO₂ absorption was shown in Figure S1. The upper phase
 18 was CO₂-lean phase and 1-butanol-rich phase; the lower phase was CO₂-rich phase
 19 and 1-butanol-lean phase.

20 Table S1- Identification of hydrogen atoms in the NMR spectra

Component	Structure and identification
MDEA/MDEAH ⁺	
1-butanol	
DMF	



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22 Fig.S1 ¹H NMR spectrum of the CPCA with 30wt% MDEA and 1-butanol concentration of 43%

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(a. upper phase; b. lower phase)

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