

Supplementary Materials for “Ionic liquids/deep eutectic solvents-based hybrid solvents for CO₂ capture”

Table S1. Full names and abbreviations of ILs, components of DESs and hybrid solvents.

Full name	Abbreviation
3-(dimethylamino)-1-propylammonium formate	[DMAPAH][Formate]
Tributylethylphosphonium succinimide	[P ₄₄₄₂][Suc]
Tetramethylgunidinium imidazole	[TMGH][Im]
Tetrabutylphosphonium formate	[P ₄₄₄₄][HCOO]
1-butyl-2,3-dimethylimidazolium imidazolate	[BMMIM][Im]
1-butyl-2,3-dimethylimidazolium acetate	[BMMIM][Ac]
(3-aminopropyl) tributyl phosphonium glycinate	[P ₄₄₄₃][Gly]
1-hexyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide	[HMIM][Tf ₂ N]
1-hexyl-3-methylimidazolium tris (pentafluoroethyl) trifluoro phosphate	[HMIM][FAP]
1-butyl-3-methylimidazolium acetate	[BMIM][Ac]
1-butyl-3-methylimidazolium bromide	[BMIM][Br]
1-ethyl-3-methylimidazolium bromide	[EMIM][Br]
Choline glycine	[Cho][Gly]
Triethylenetetramine lysine	[TETAH][Lys]
1-allyl-3-methylimidazolium bis(trifluoromethyl sulfonyl)imide	[AMIM][Tf ₂ N]
(2-hydroxyethyl)-trimethyl-ammonium (S)-2-pyrrolidine-carboxylic	[Cho][Pro]
Tetrabutylphosphonium glycinate	[P ₄₄₄₄][Gly]
Tetrabutylphosphonium alaninate	[P ₄₄₄₄][Ala]
Tetrabutylphosphonium prolinatate	[P ₄₄₄₄][Pro]
Diethylenetriamine hydrobromide	[DETAH][Br]
Diethylenetriamine tetrafluoroborate	[DETAH][BF ₄]
Butyltrimethylammonium bis(trifluoromethylsulfonyl)imide	[N ₁₁₁₄][Tf ₂ N]
1-butyl-3-methylimidazolium tetrafluoroborate	[BMIM][BF ₄]
Tetraethylenepentamine 2-methylimidazolium	[TEPAH][2-MI]
1-methyl-1-propylpyrrolidinium dicyanamide	[PMPy][DCA]
Butyltrimethylammonium bis-(trifluoromethyl sulfonyl)imide	[N ₁₁₁₄][Tf ₂ N]
1-ethyl-3-methylimidazolium acetate	[EMIM][Ac]
1-ethyl-3-methylimidazolium alaninate	[EMIM][Ala]
1-ethyl-3-methylimidazolium glycinate	[EMIM][Gly]
1-(2-aminoethyl)-3-methylimidazolium tetrafluoroborate	[NH ₂ e-mim][BF ₄]
N-butyl-1-Methylpyrrolidinium dicyanamide	[BMPyrr][DCA]
N,N-dimethylethylenediammonium formate	[DMEDAH][Formate]
3-(dimethylamino)-1-propylammonium octanoate	[DMAPAH][Octanoate]
3-(dimethylamino)-1-propylammonium acetate	[DMAPAH][Ac]
Tetramethylammonium lysinate	[N ₁₁₁₁][Lys]
Diethylammonium butanoate	[DEA][Bu]
Tributyl(ethyl)phosphonium 1,2-cyclohexanedicarboximide	[P ₄₄₄₂][Cy-Suc]
Methyltriphenyl phosphonium bromide	[MTPP][Br]

1-butyl-3-methylimidazolium nitrate	[BMIM][NO ₃]
Triethylmethylanmonium chloride	[TEMA][Cl]
Trihexyl(tetradecyl)phosphonium 1,2,4 triazolid	[P ₆₆₆₁₄][4-Triz]
1-butyl-3-methylimidazolium tetrafluoroborate	[BMIM][BF ₄]
Tetraethylammonium lysinate	[N ₂₂₂₂][Lys]
Tetraethylammonium glycinate	[N ₂₂₂₂][Gly]
Tetramethylammonium glycinate	[N ₁₁₁₁][Gly]
Choline chloride	[Ch][Cl]
3-(dimethylamino)-1-propylammonium formate	[DMAPAH][Formate]
Triethylbutylammonium acetate	[N ₂₂₂₄][Ac]
Tetraethylammonium acetate	[N ₂₂₂₂][Ac]
Tributylhexylphosphonium lysinate	[P ₆₄₄₄][Lys]
1-aminoethyl-3-methylimidazolium lysinate	[C ₂ NH ₂ MIM][Lys]
1-allyl-3-methylimidazolium bis(trifluoromethyl sulfonyl)imide	[AMIM][Tf ₂ N]
Butyltrimethylammonium bis(trifluoromethylsulfonyl)imid	[N ₄₁₁₁][Tf ₂ N]
1-butyl-3-methylimidazolium tetrafluoroborate	[BMIM][BF ₄]
Trihexyl(tetradecyl)phosphonium 1,2,3 triazolid	[P ₆₆₆₁₄][3-Triz]
1-butyl-1-methylpyrrolidinium dicyanamide	[BMPyrr][DCA]
Octyltriethylphosphonium 4-nitro imidazolid	[P ₆₆₆₁₄][4-NO ₂ imid]
Trihexyl(tetradecyl)phosphonium 4,5-dicyano imidazolid	[P ₆₆₆₁₄][4,5-CNimid]
Trihexyl(tetradecyl)phosphonium bis(trifluoromethylsulfonyl)imide	[P ₆₆₆₁₄][Tf ₂ N]
Trihexyl(tetradecyl)phosphonium 2-methyl-5-nitro imidazolid	[P ₆₆₆₁₄][2-CH ₃ ,5-NO ₂ imid]
Trihexyl(tetradecyl)phosphonium dicyanamide	[P ₆₆₆₁₄][DCA]
Trihexyl(tetradecyl)phosphonium 6-bromo-benzimidazolid	[P ₆₆₆₁₄][BrBnIm]
Trihexyl(tetradecyl)phosphonium acetate	[P ₆₆₆₁₄][Ac]
1-hexyl-2-methyl-3-methylimidazolium bis(trifluoromethylsulfonyl) imide	[HMMIM][Tf ₂ N]
Trihexyl(tetradecyl)phosphonium 1,2,4 triazolid	[P ₆₆₆₁₄][4-Triz]
Tributyl(dodecyl)phosphonium 1,2,3 triazolid	[P ₄₄₄₁₂][3-Triz]
Octyltriethylphosphonium 4-nitro pyrazolid	[P ₂₂₂₈][4-NO ₂ pyra]
Octyltriethylphosphonium 4-nitro imidazolid	[P ₂₂₂₈][4-NO ₂ imid]
Octyltriethylphosphonium 2-methyl-5-nitro imidazolid	[P ₂₂₂₈][2-CH ₃ ,5-NO ₂ imid]
1-butene-2-methyl-3-methylimidazolium 4-nitro pyrazolid	[mm(butene)im][4-NO ₂ pyra]
Butyltriethylphosphonium 2-methyl-5-nitro imidazolid	[P ₂₂₂₄][2-CH ₃ ,5-NO ₂ imid]
1-propyl-2-methyl-3-methylimidazolium 4-nitro pyrazolid	[pmmim][4-NO ₂ pyra]
Benzyltrimethylammonium chloride	[BTMA][Cl]
1-butyl-3-methylimidazolium chloride	[BMIM][Cl]
N-benzyl-2-hydroxy-N,N-dimethyl ethanaminium chloride	[BHDE][Cl]
2-Amino-2-methyl-1-propanol	AMP
Monoethanolamine	MEA
Glycerol	GLY
Polyethylene glycol	PEG

Triethylene glycol	TEG
Tetraglyme	TG
N-methyldiethanolamine	MDEA
1,5-diazabicyclo[4.3.0]-non-5-ene	DBN
Ethylene glycol	EG
Diethanolamine	DEA
Dimethaminoethoxyethanol	DMEE
Poly(ethylene oxide)	PEO
Diethylenetriamine	DETA
Propan-1-ol	NPA
Malonic acid	MA
Levulinic acid	LEV
1,5-diazabicyclo[4.3.0]-non-5-ene	DBN
1,5,7-triazabicyclo[4.4.0]-dec-5-ene	TBD
1,8-diazabicyclo[5.4.0]undec-7-ene	DBU
Acetic acid	Ac
