

Supporting Information

Bio-based Ether Solvent and Ionic Liquid Electrolyte for Sustainable Sodium-Air Batteries

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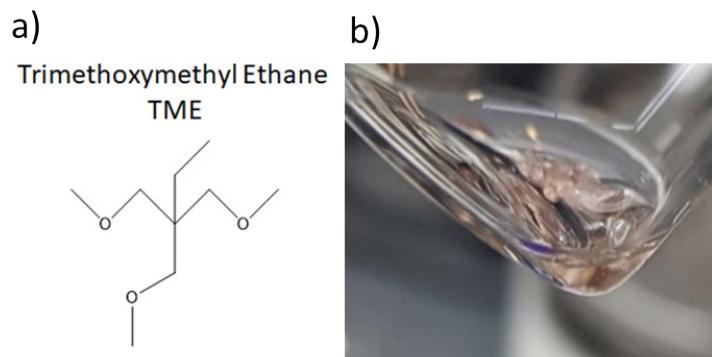


Figure S1 a) Molecular structure of trimethoxymethyl ethane b) Reactivity of sodium when immersed in trimethoxymethyl ethane after 5 days.

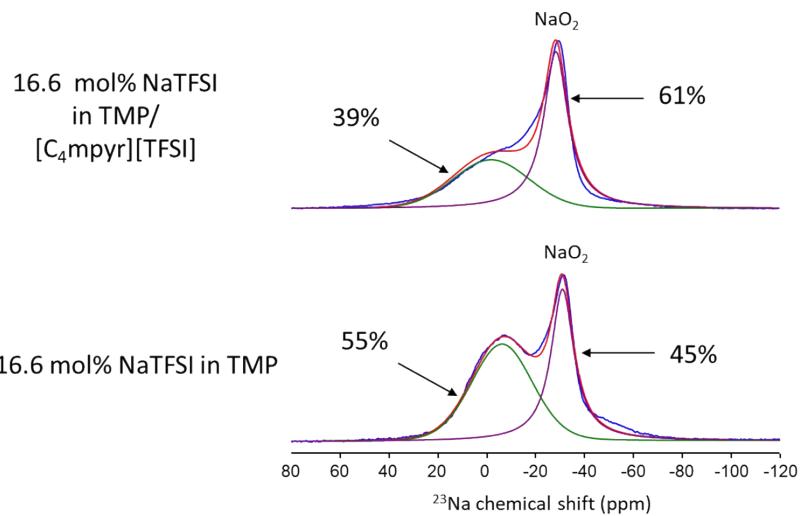


Figure S2 ^{23}Na Solid-state NMR spectra of discharged air cathodes for (top) 16.6 mol% NaTFSI/TMP/[C₄mpyr][TFSI] and (bottom) 16 mol% NaTFSI/TMP.

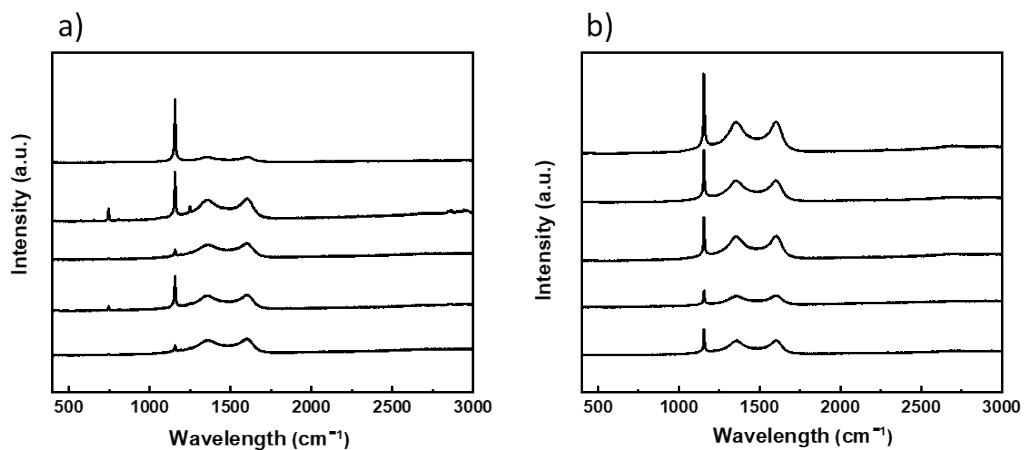


Figure S3 Raman spectra of discharged air cathodes in different points for (a) 16.6 mol% NaTFSI/TMP and (b) 16 mol% NaTFSI/TMP/[C₄mpyr][TFSI].

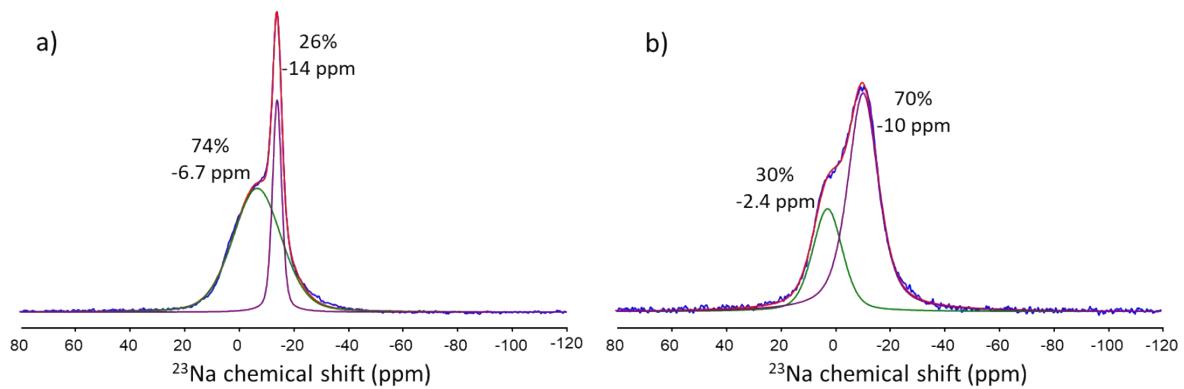


Figure S4 ^{23}Na Solid-state NMR spectra of cycled air cathodes for (a) 16.6 mol% NaTFSI/TMP and (b) 16 mol% NaTFSI/TMP/[C₄mpyr][TFSI].

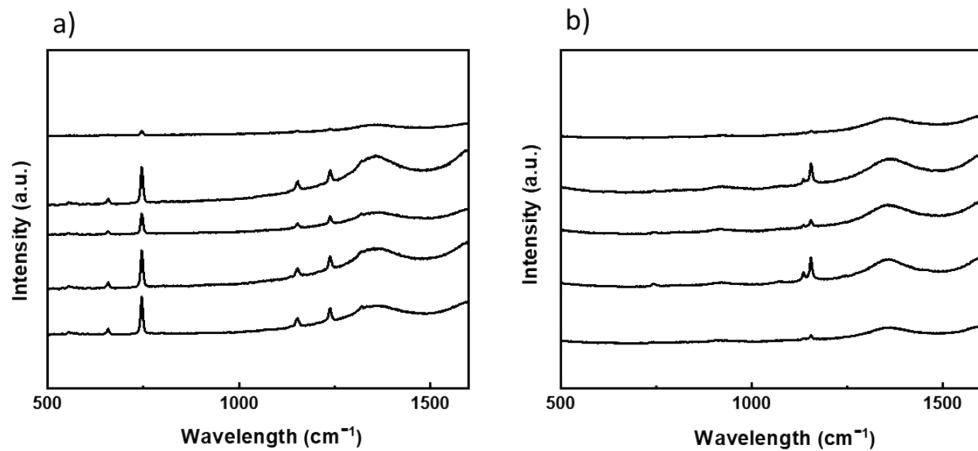


Figure S5 RAMAN spectra of cycled air cathodes in different points for a) 16.6 mol% NaTFSI/TMP and b) 16 mol% NaTFSI/TMP/[C₄mpyr][TFSI].