

Supplementing Information

Thermal decomposition, low temperature phase transitions and vapor pressure of less common ionic liquids based on the bis(trifluoromethanesulfonyl)imide anion.

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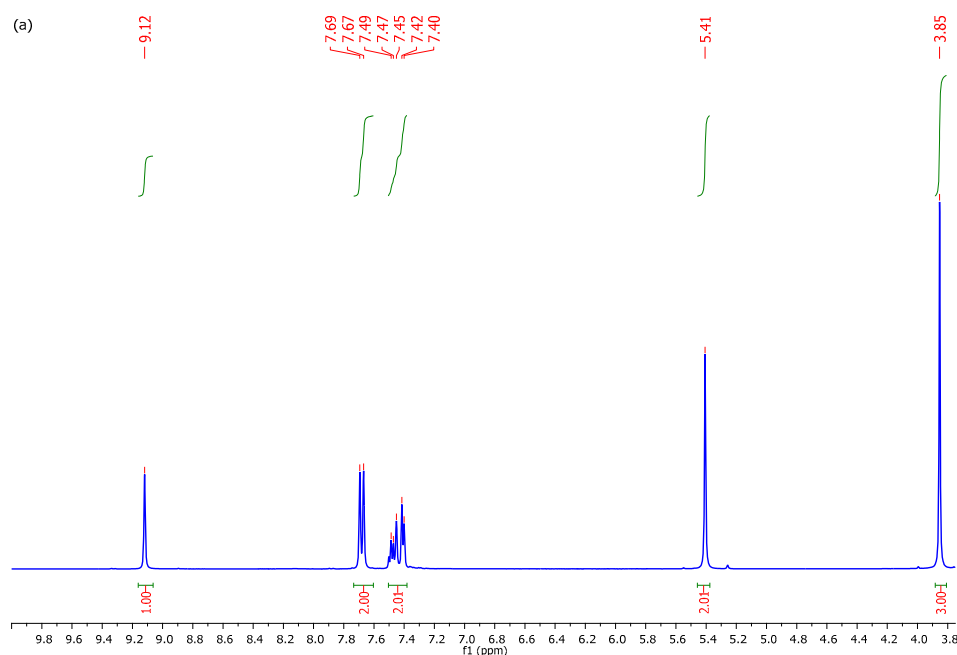
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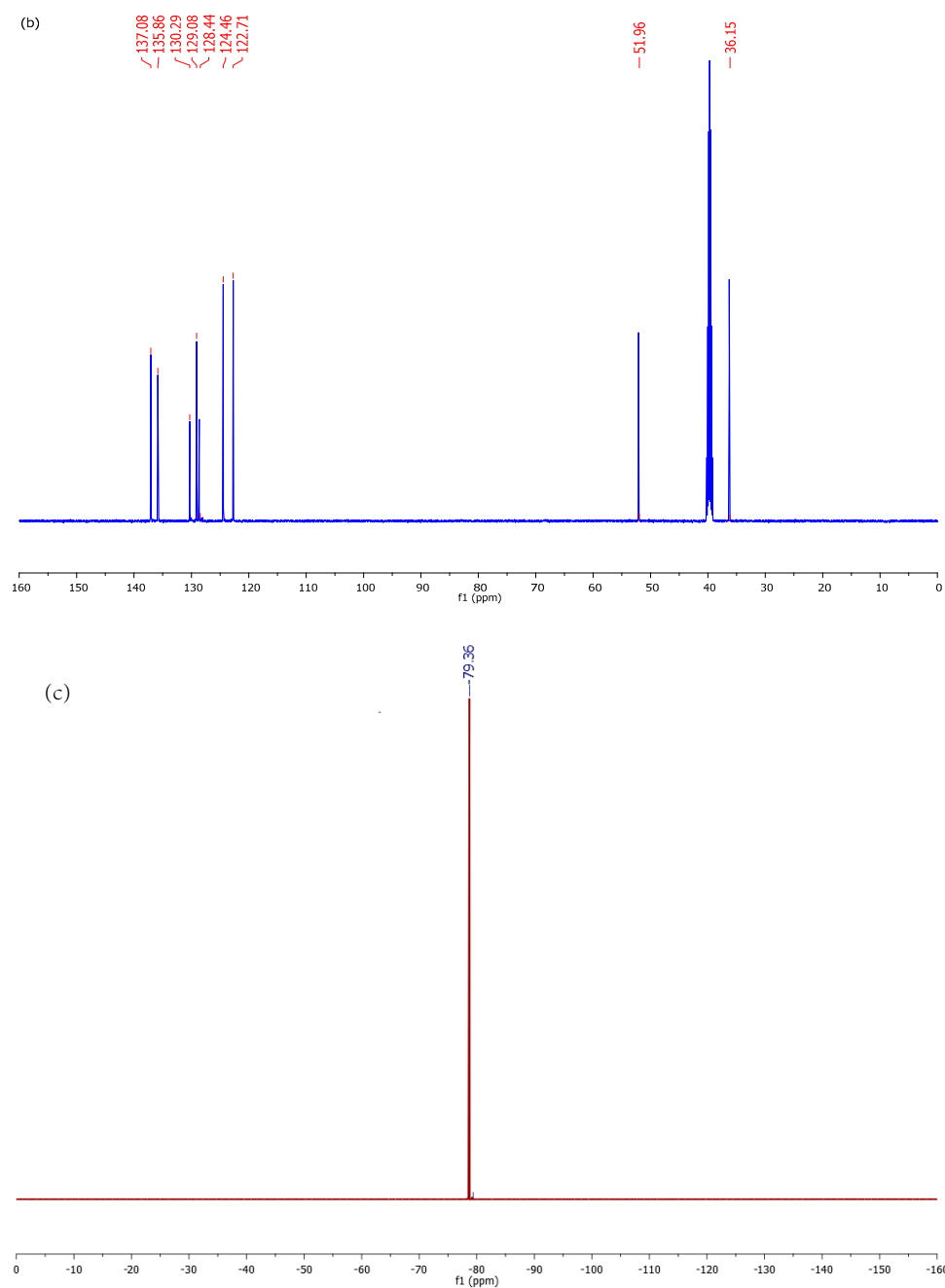
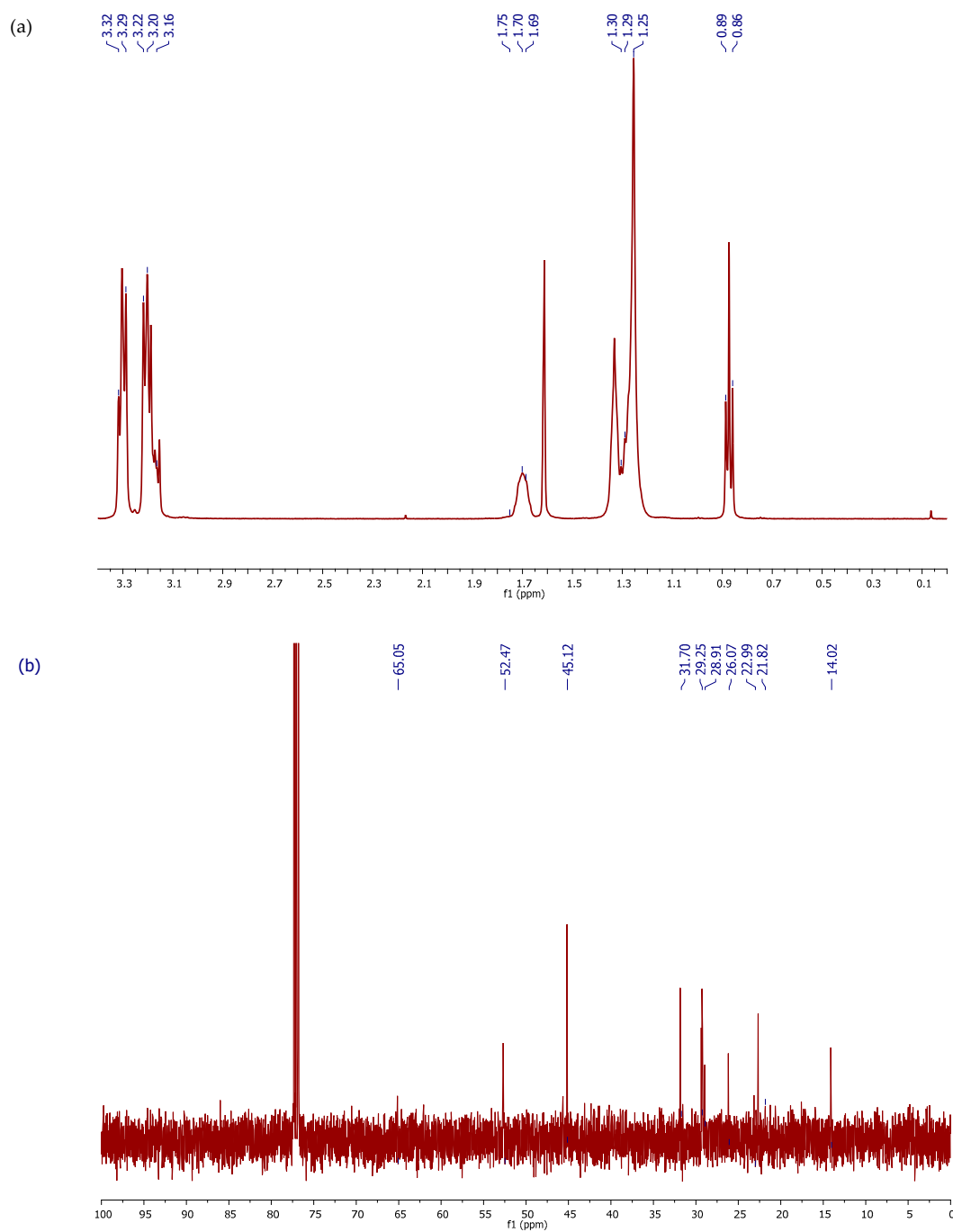


Figure S1. ^1H NMR (500 MHz) (a), ^{13}C NMR (125.75 MHz) (b) and ^{19}F NMR (470.62 MHz) (c) of $[\text{m-C}_6\text{H}_4(\text{CH}_2\text{ImMe})_2^+][\text{NTf}_2^-]_2$.



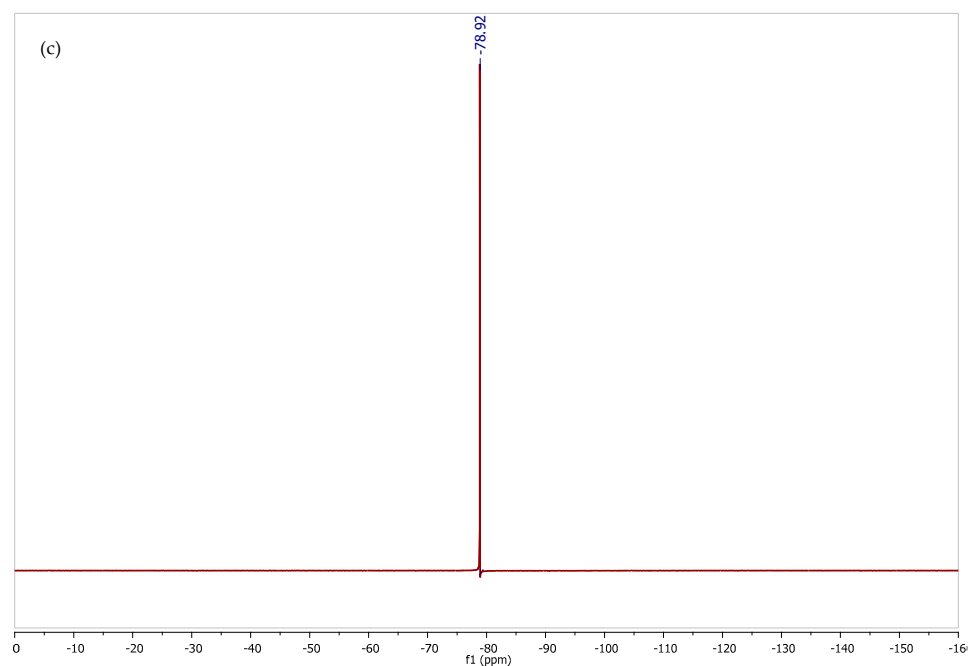


Figure S2. ^1H NMR (500 MHz) (a), ^{13}C NMR (125.75 MHz) (b) and ^{19}F NMR (470.62 MHz) (c) of $[\text{DABCO10}^+][\text{NTf}_2^-]$.

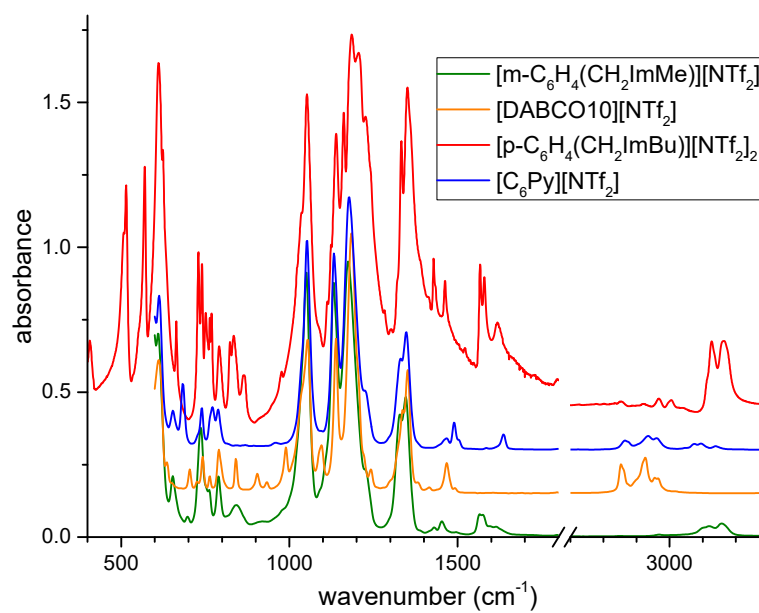


Figure S3. Infrared absorption spectra of the four ionic liquids.

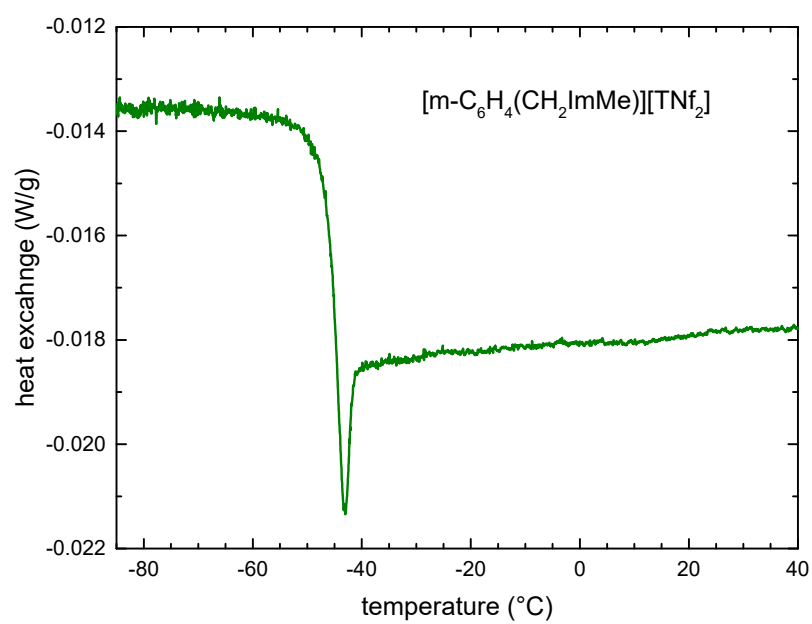


Figure S4. DSC trace of $[m\text{-C}_6\text{H}_4(\text{CH}_2\text{ImMe})]_2[\text{NTf}_2]_2$, measured with a scanning rate of 1 °C/min.