

Supporting Information

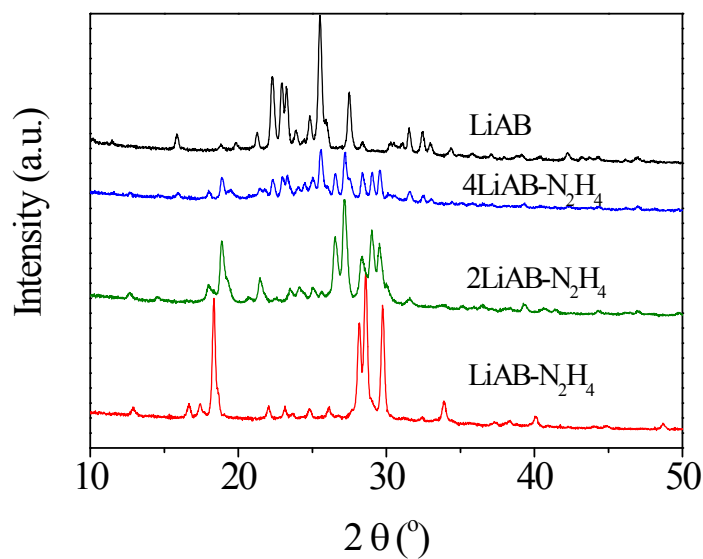


Figure S1 XRD patterns of LiAB complexed with hydrazine with different molar ratio compared with pristine LiAB.

Table S1 NH₃ concentrations of gaseous products from nLiAB·NH₂NH₂.

	75 °C	170 °C
LiAB·NH₂NH₂	14.1 mol%	11.4 mol%
2LiAB·NH₂NH₂	0.15 mol%	0.53 mol%
4LiAB·NH₂NH₂	0.09 mol%	0.37 mol%

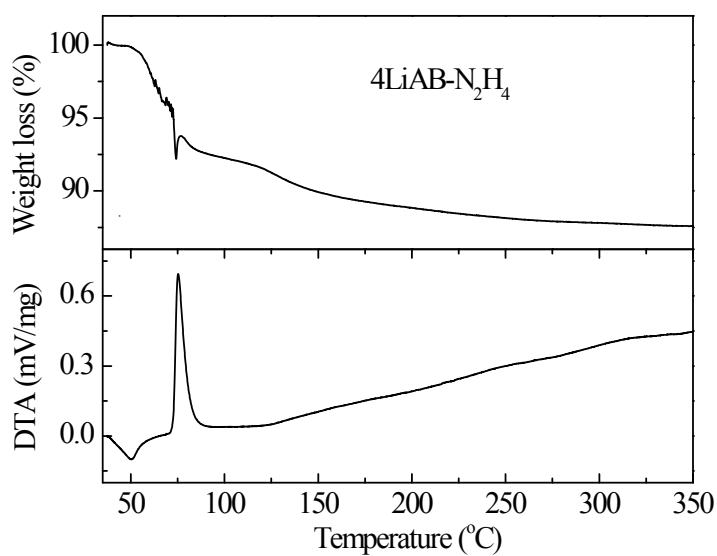


Figure S2 TG-DTA curves of 4LiAB·NH₂NH₂.

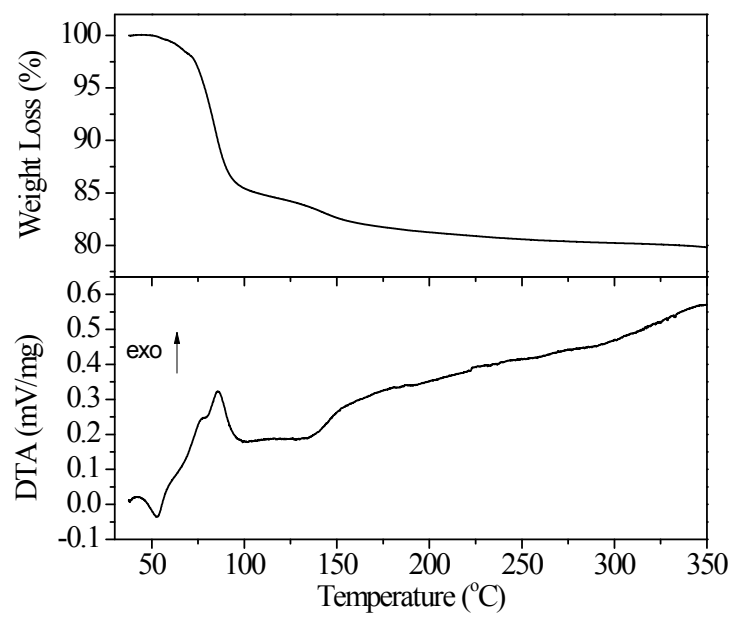


Figure S3 TG-DTA curves of $2\text{LiAB-NH}_2\text{NH}_2$.

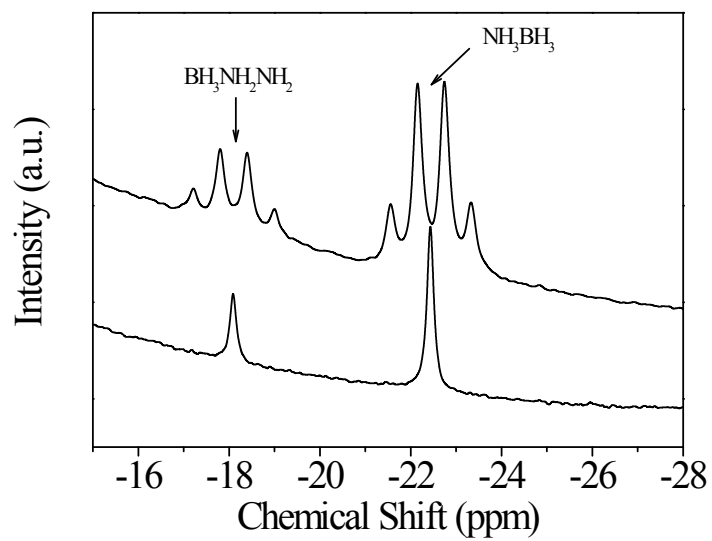


Figure S4 ^{11}B NMR spectra of regenerated post dehydrogenated $4\text{LiAB-NH}_2\text{NH}_2$ sample in THF solution.