

Supplementary Materials

# Effects of Glymes on the Distribution of $\text{Mg}(\text{B}_{10}\text{H}_{10})$ and $\text{Mg}(\text{B}_{12}\text{H}_{12})$ from the Thermolysis of $\text{Mg}(\text{BH}_4)_2$

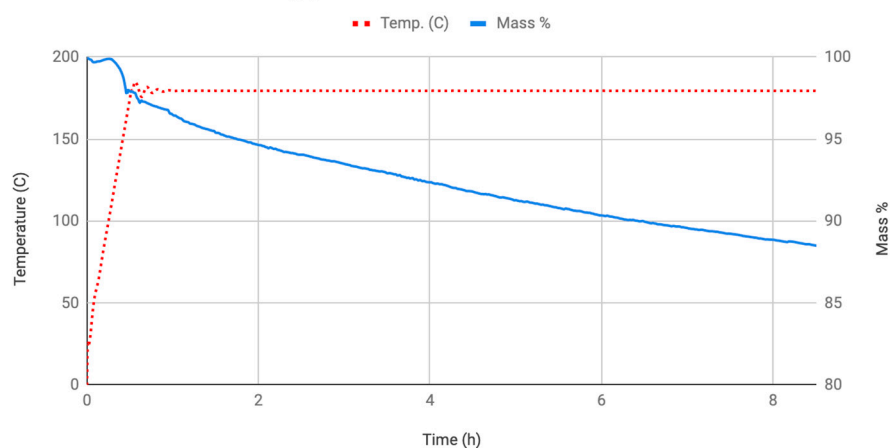
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## TGA Results - 1:1 Monoglyme:MBH



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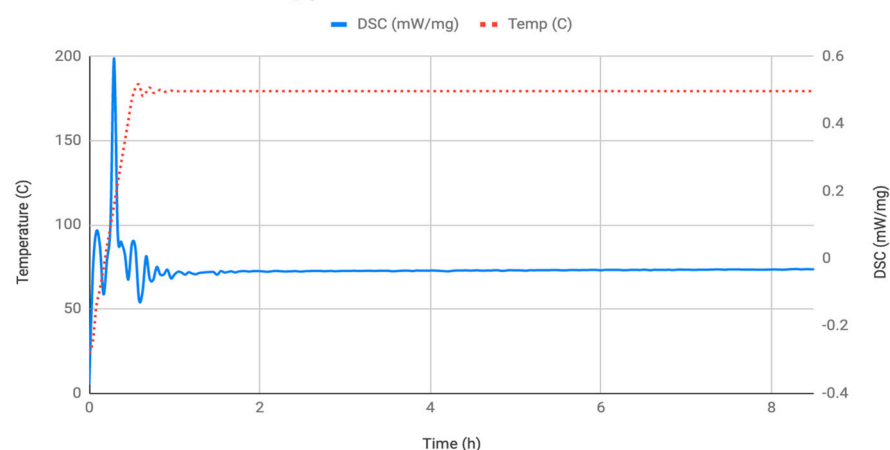
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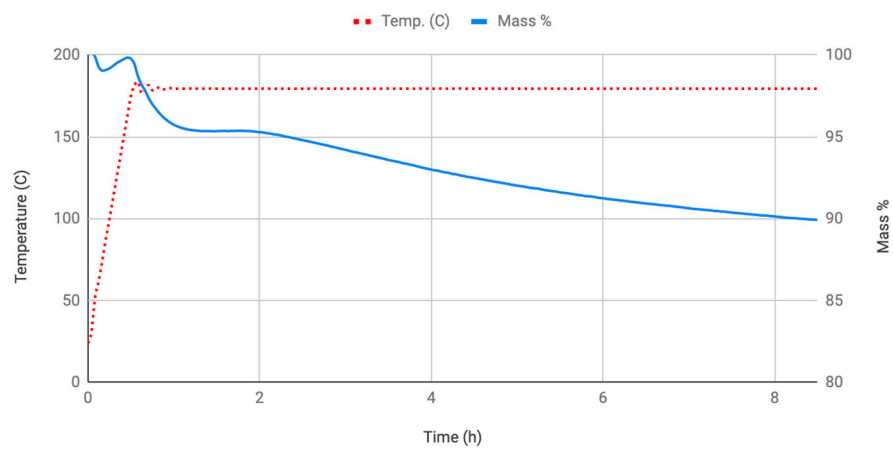
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## DSC Results - 1:1 Monoglyme:MBH

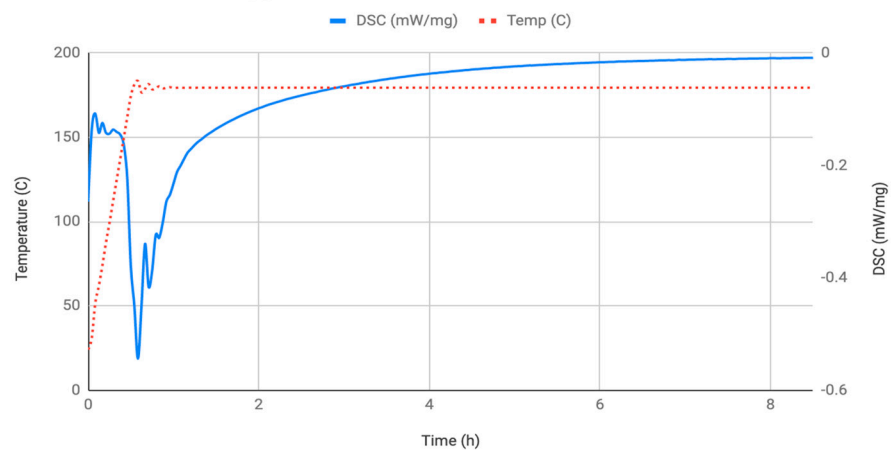


**Figure S1.** TGA-DSC data for the 1:1 reaction of G1 and  $\text{Mg}(\text{BH}_4)_2$ . Ramp rate 5K/min.

## TGA Results - 1:1 Diglyme:MBH

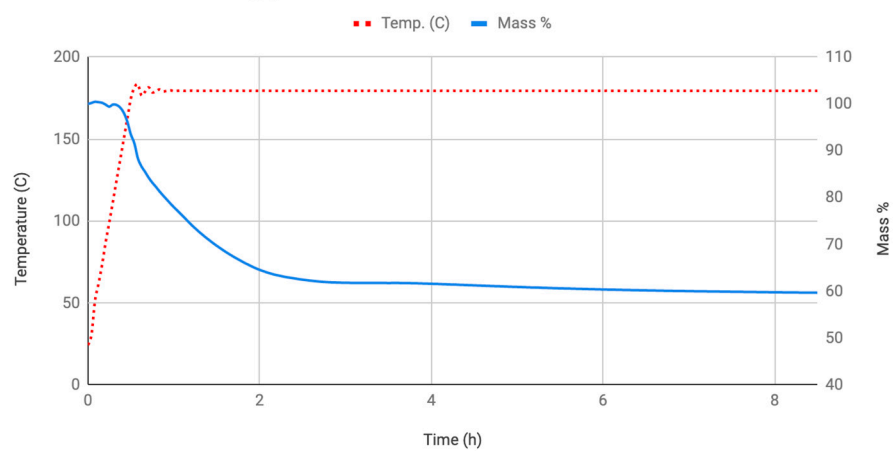


## DSC Results - 1:1 Diglyme:MBH

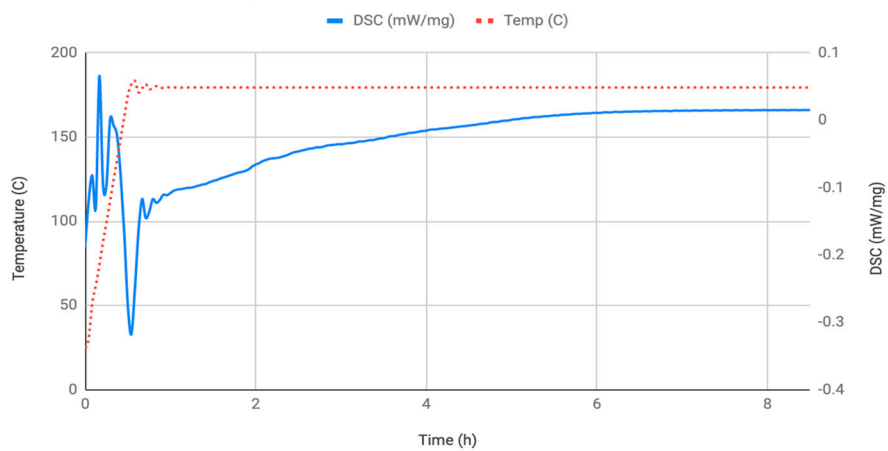


**Figure S2.** TGA-DSC data for the 1:1 reaction of G2 and  $\text{Mg}(\text{BH}_4)_2$ . Ramp rate 5K/min.

## TGA Results - 1:1 Triglyme:MBH

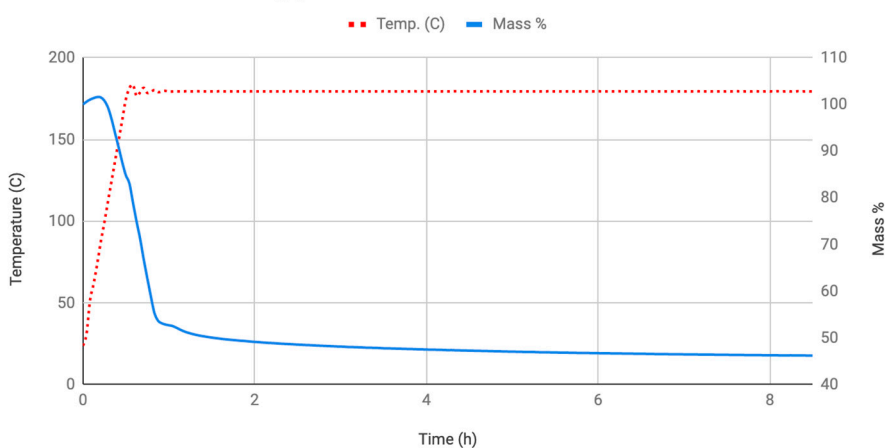


## DSC Results - 1:1 Triglyme:MBH

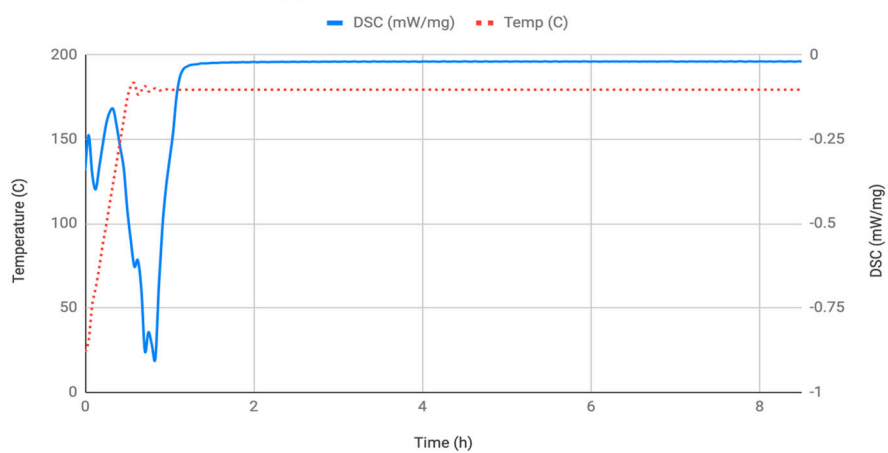


**Figure S3.** TGA-DSC data for the 1:1 reaction of G3 and  $\text{Mg}(\text{BH}_4)_2$ . Ramp rate 5K/min.

## TGA Results - 1:1 Tetraglyme:MBH



## DSC Results - 1:1 Tetraglyme:MBH



**Figure S4.** TGA-DSC data for the 1:1 reaction of G1 and  $\text{Mg}(\text{BH}_4)_2$ . Ramp rate 5K/min.