

Supplementary Information

Photoresponsive behaviour of hydrophilic/hydrophobic based novel azobenzene mesogen: Synthesis, characterization and their application in optical storage devices

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1. ¹H NMR & ¹³C NMR graphs

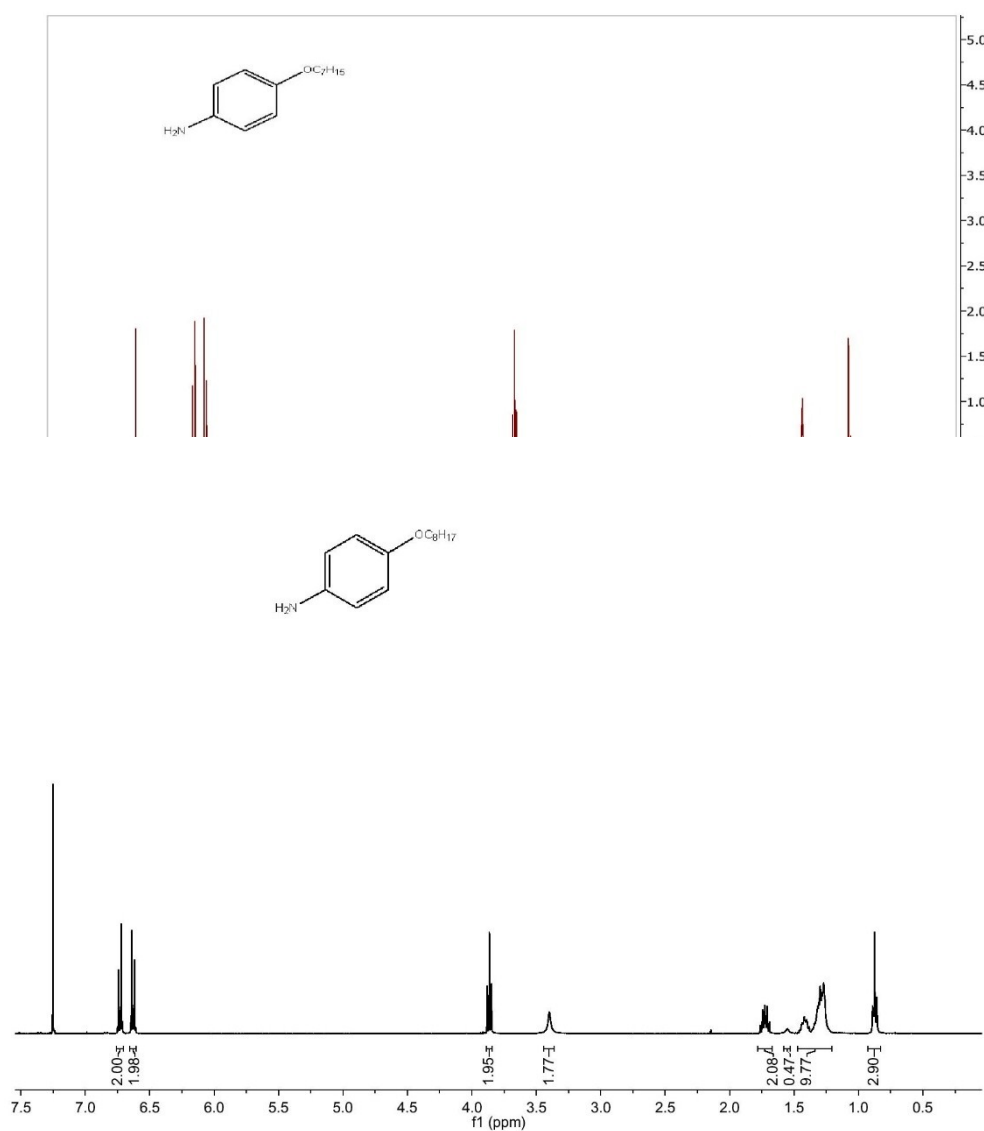


Fig. S1 ¹H
NMR
graph of
compound
d 4.

Fig. S2 ^1H NMR graph of compound 5.

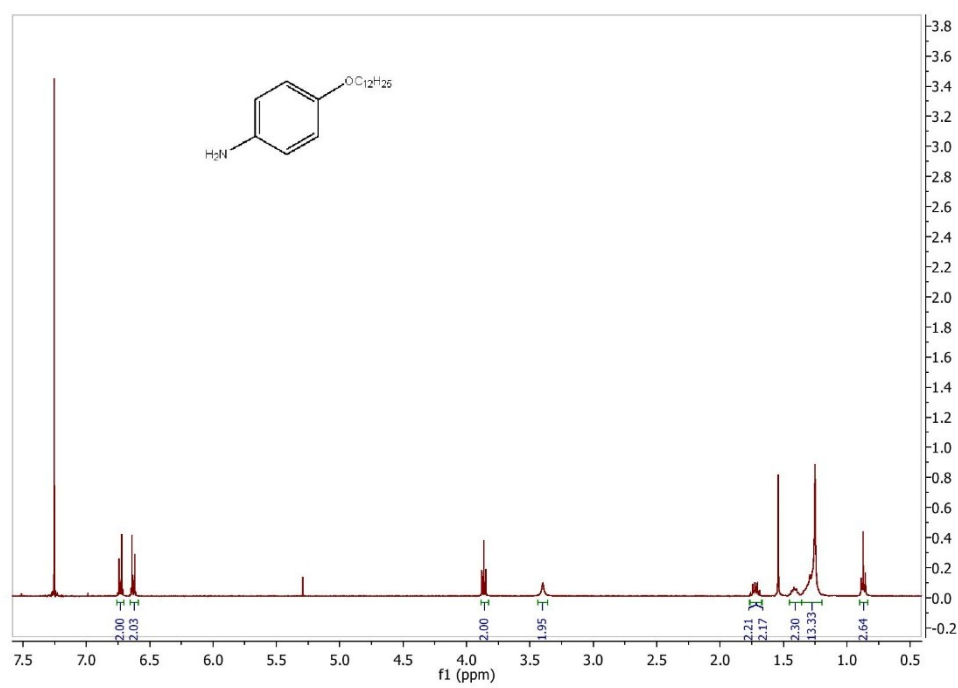


Fig. S3 ^1H NMR graph of compound 6.

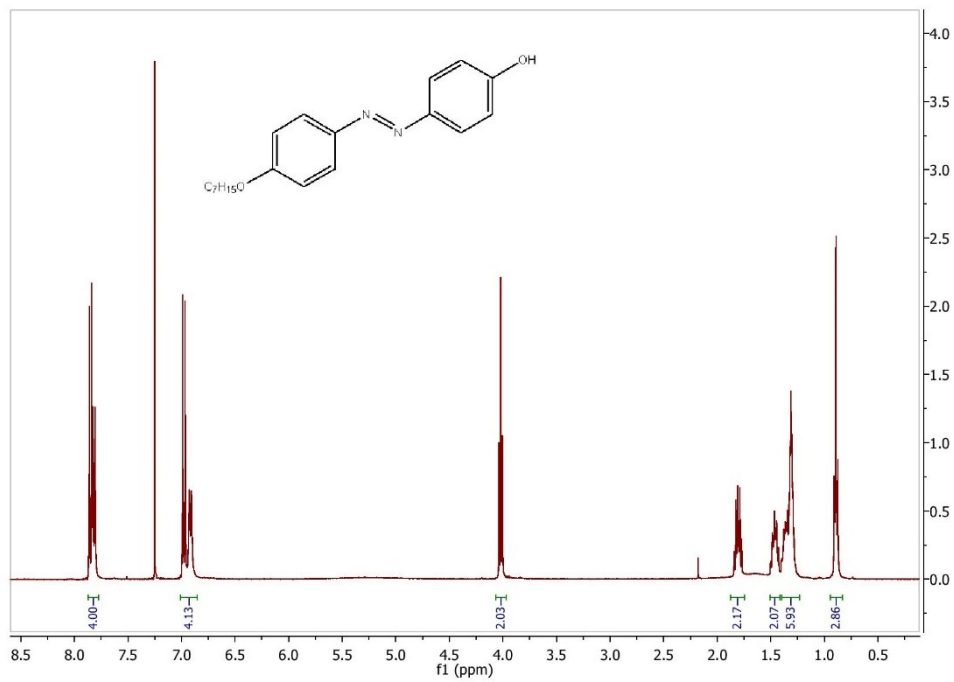


Fig. S4 ^1H NMR graph of compound 7.

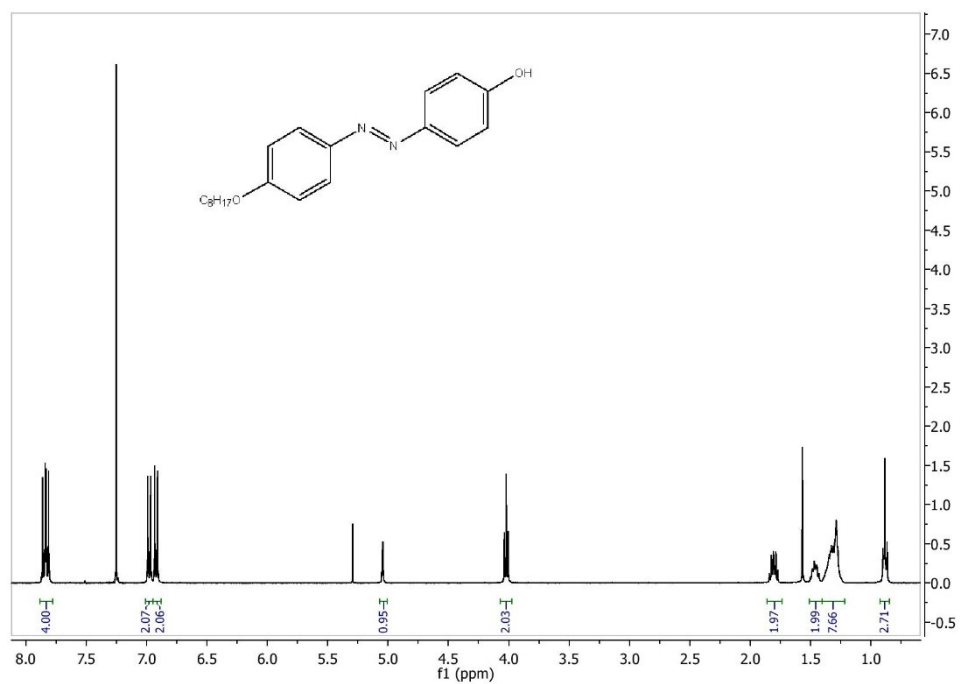


Fig. S5 ^1H NMR graph of compound 8.

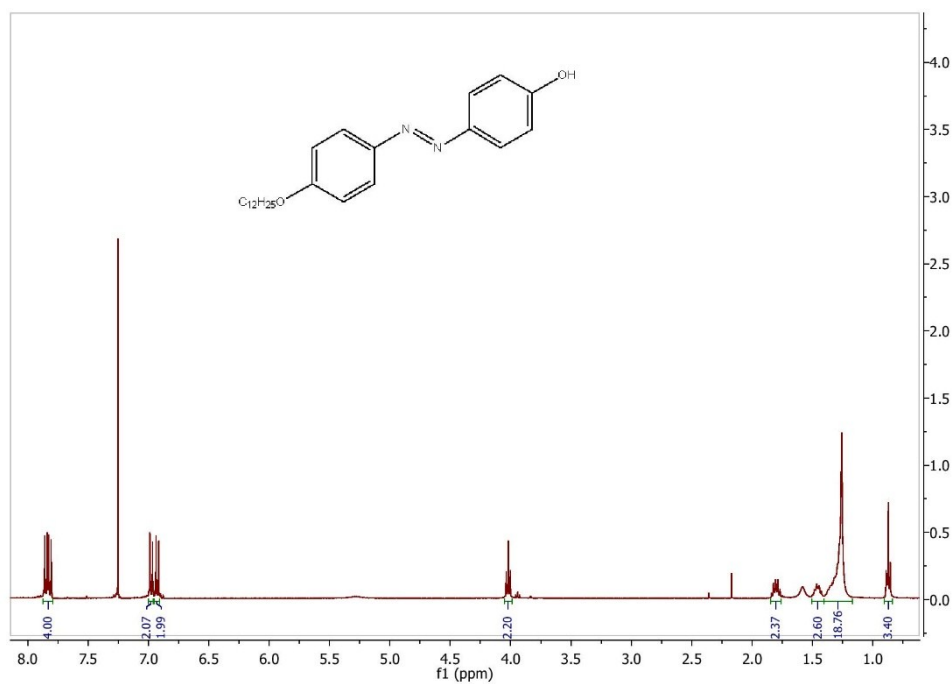


Fig. S6 ¹H NMR graph of compound 9.

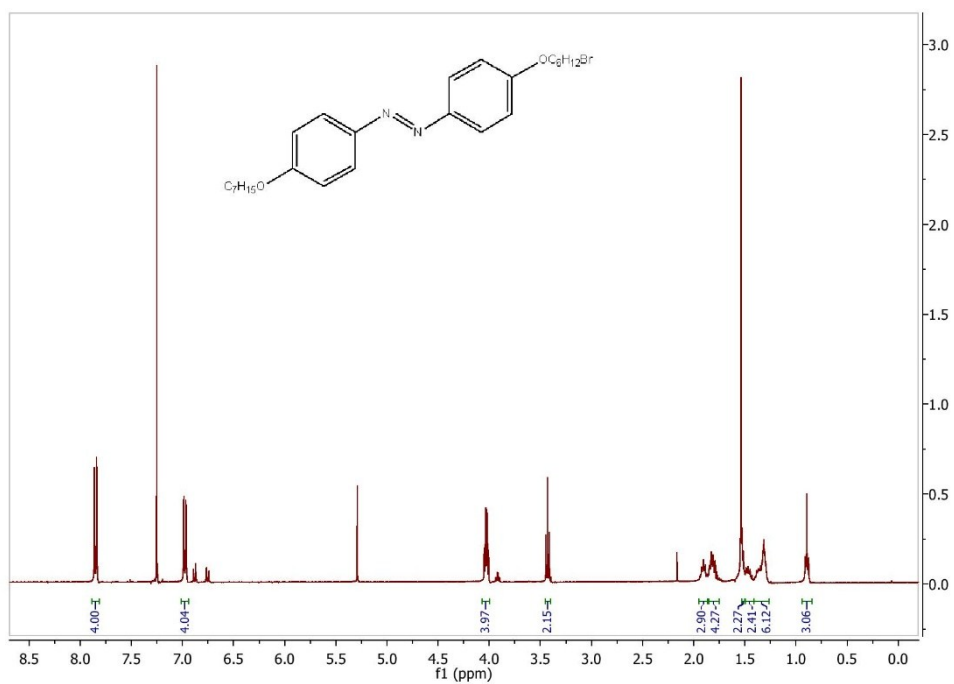


Fig. S7 ¹H NMR graph of compound 10.

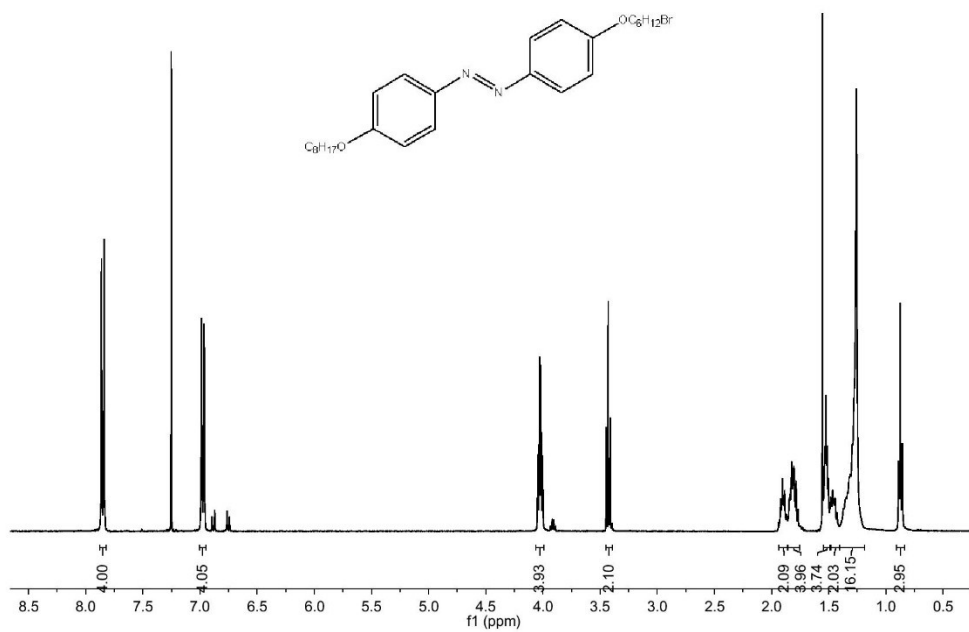


Fig. S8 ¹H NMR graph of compound 11.

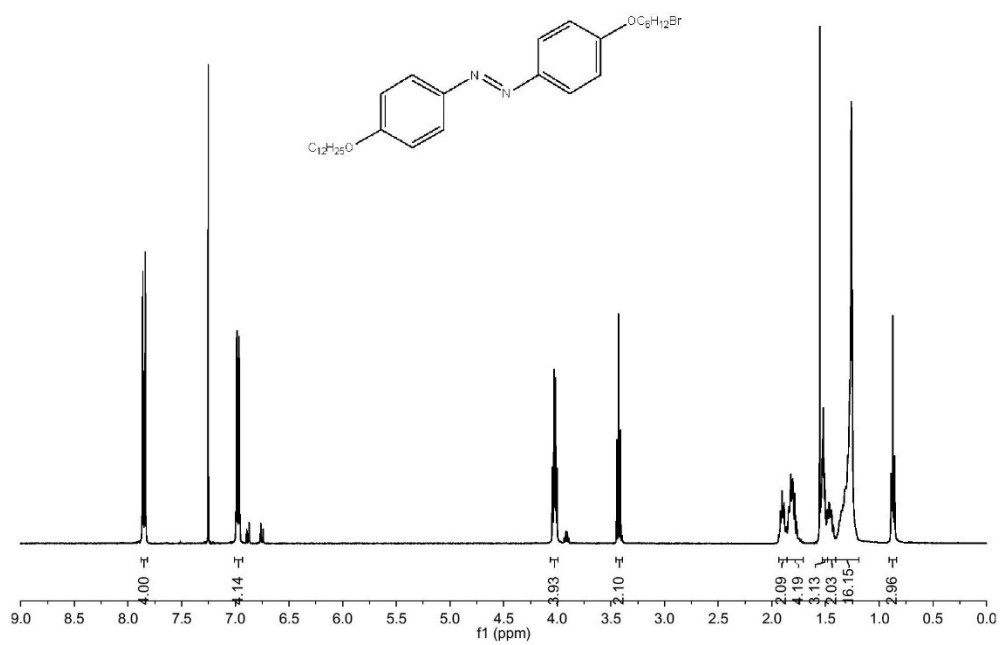


Fig. S9 ¹H NMR graph of compound 12.

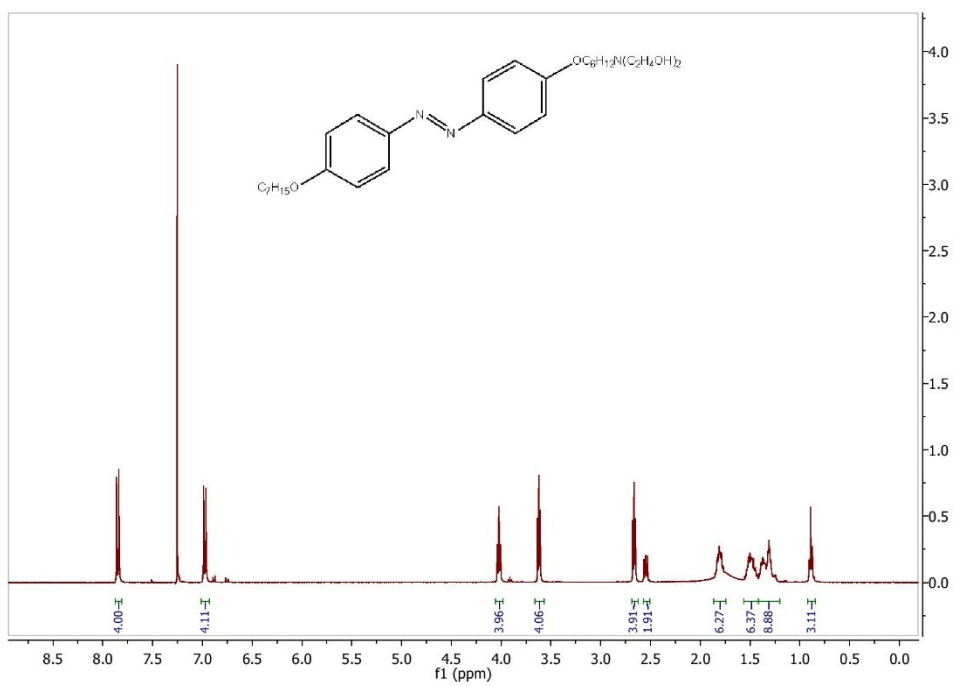


Fig. S10 ^1H NMR graph of compound 13.

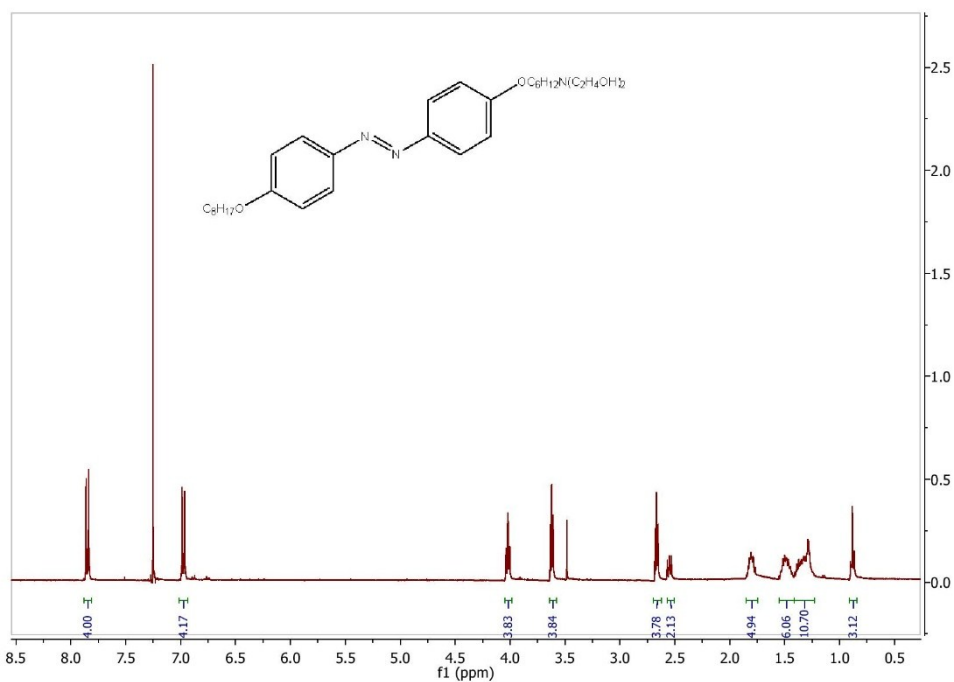


Fig. S11 ^1H NMR graph of compound 14.

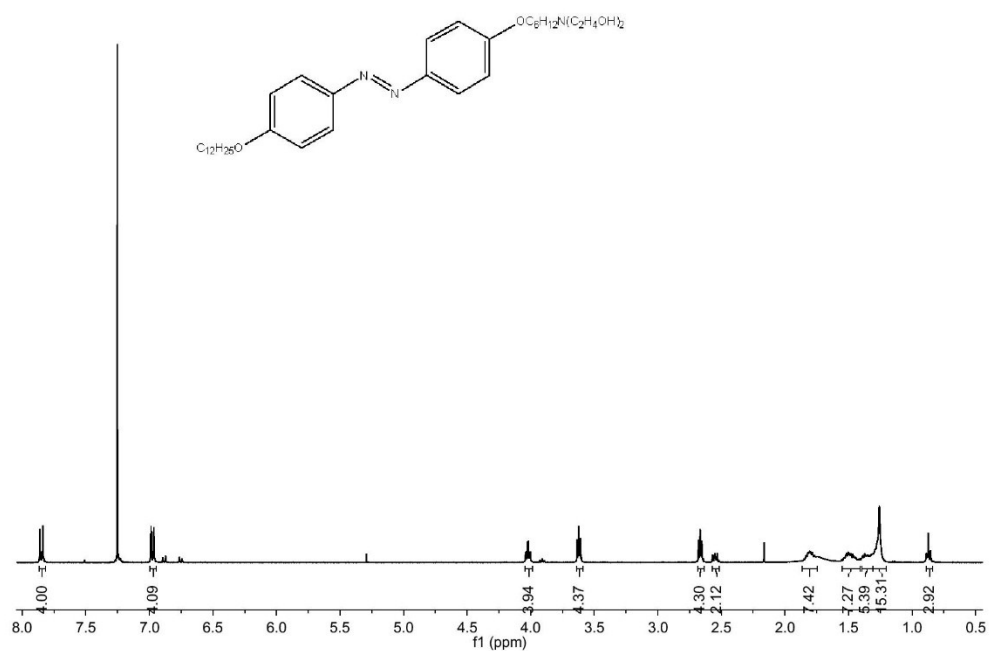


Fig. S12 ¹H NMR graph of compound 15.

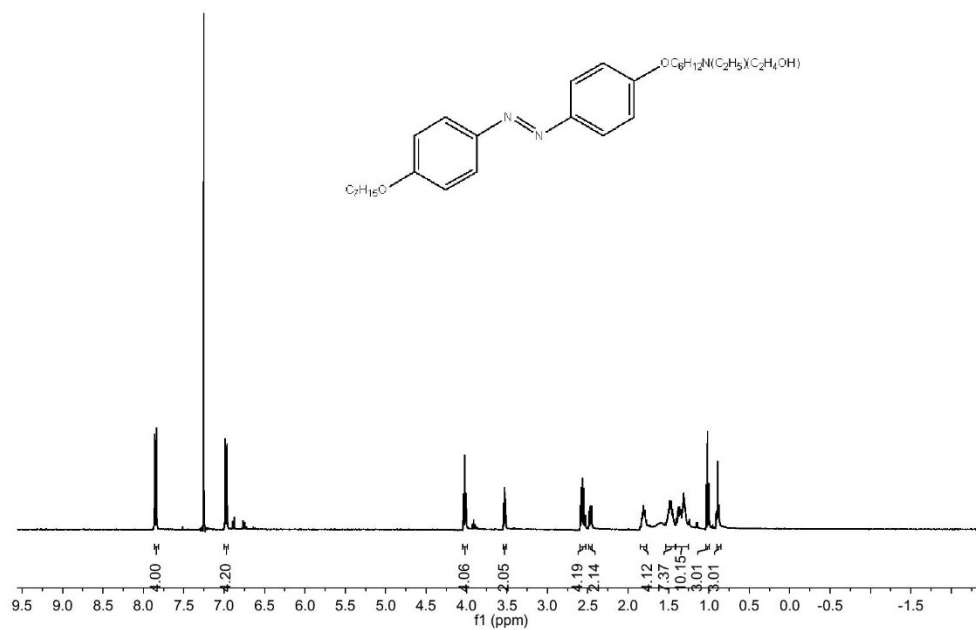


Fig. S13 ¹H NMR graph of compound 16.

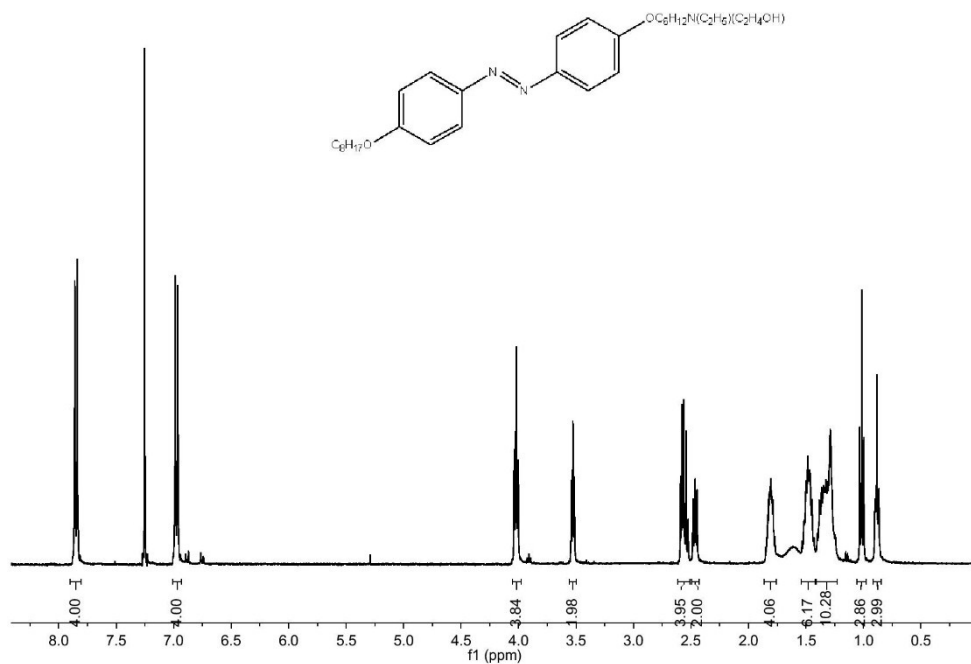


Fig. S14 ¹H NMR graph of compound 17.

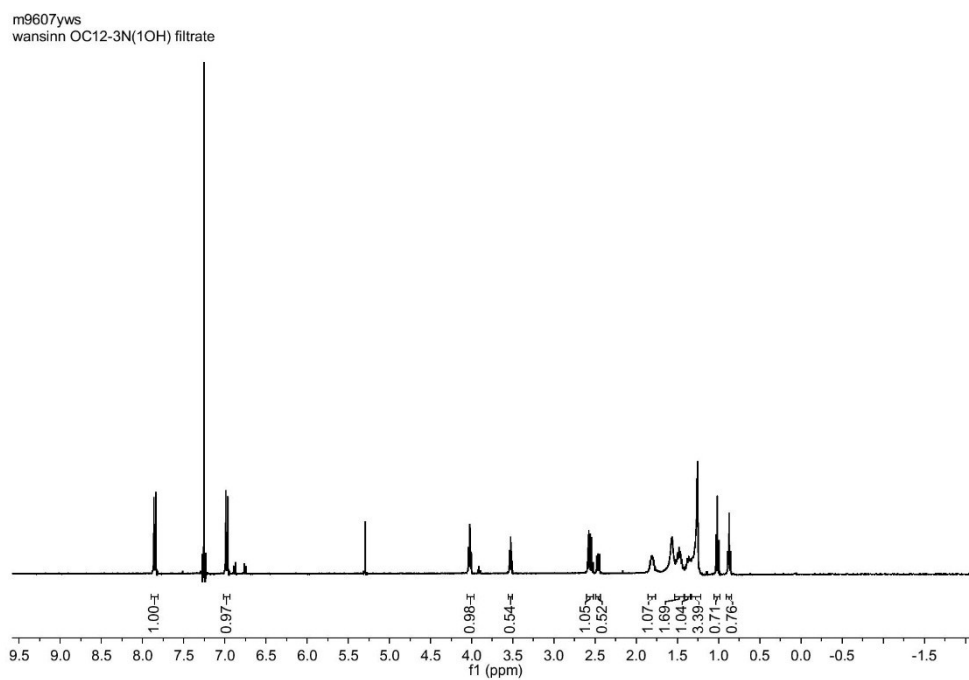


Fig. S15 ¹H NMR graph of compound 18.

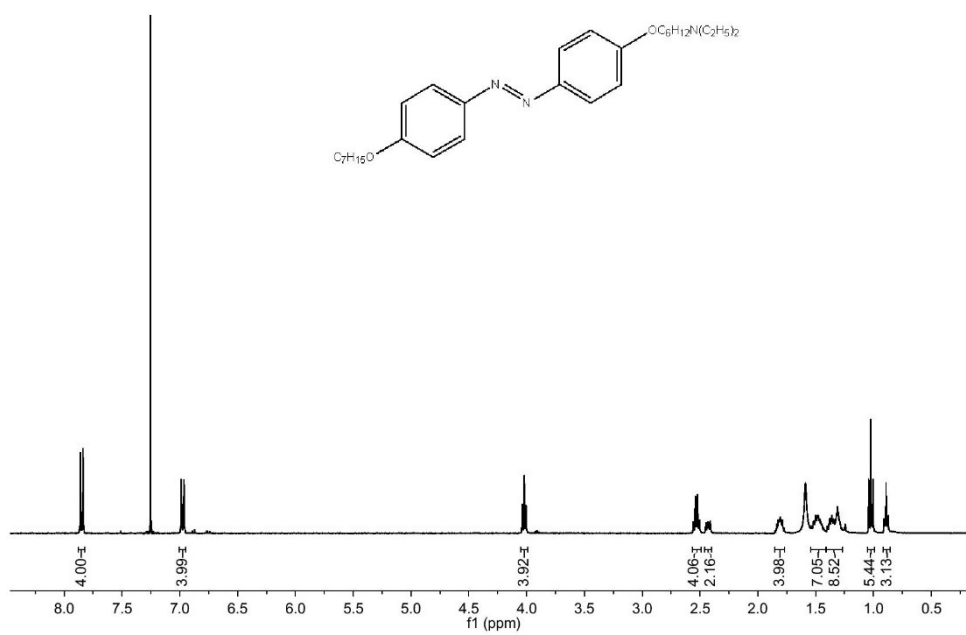


Fig. S16 ¹H NMR graph of compound 19.

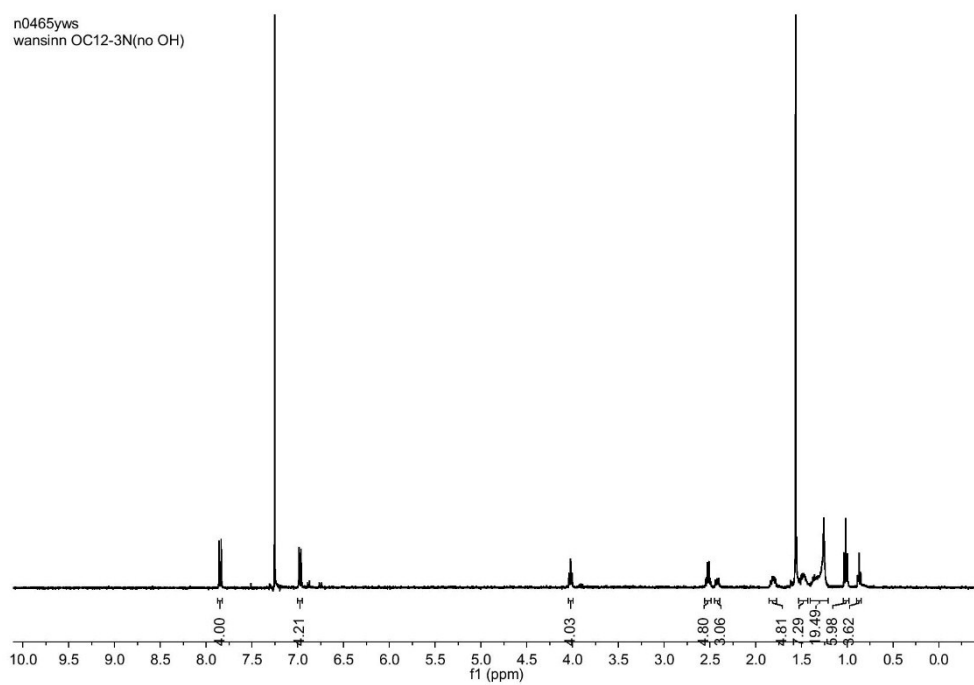


Fig. S17 ¹H NMR graph of compound 21.

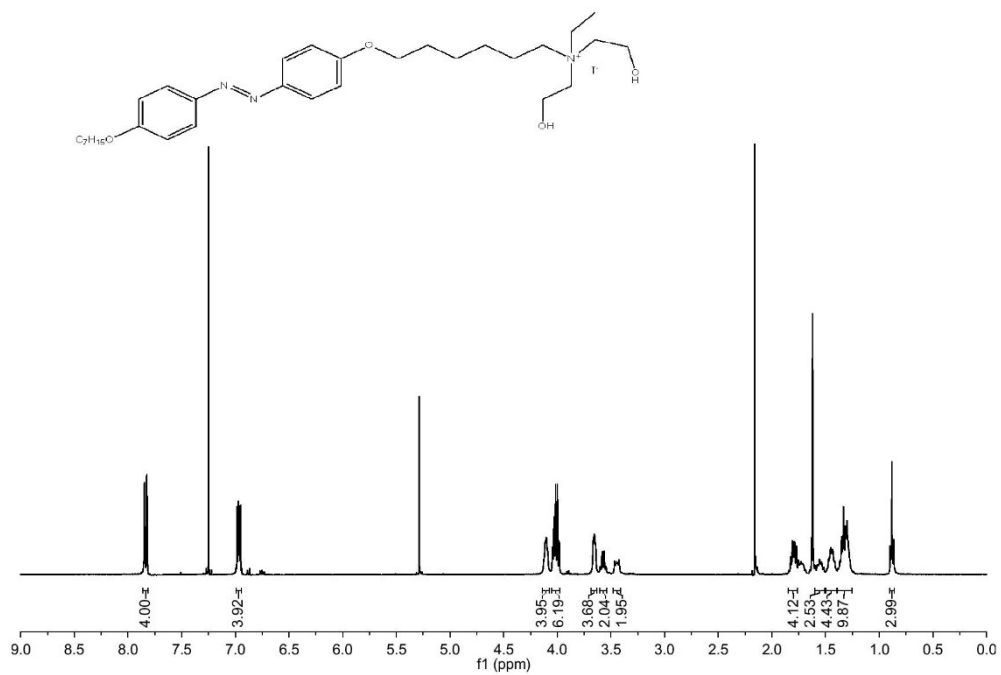


Fig. S18 ¹H NMR graph of compound 22.

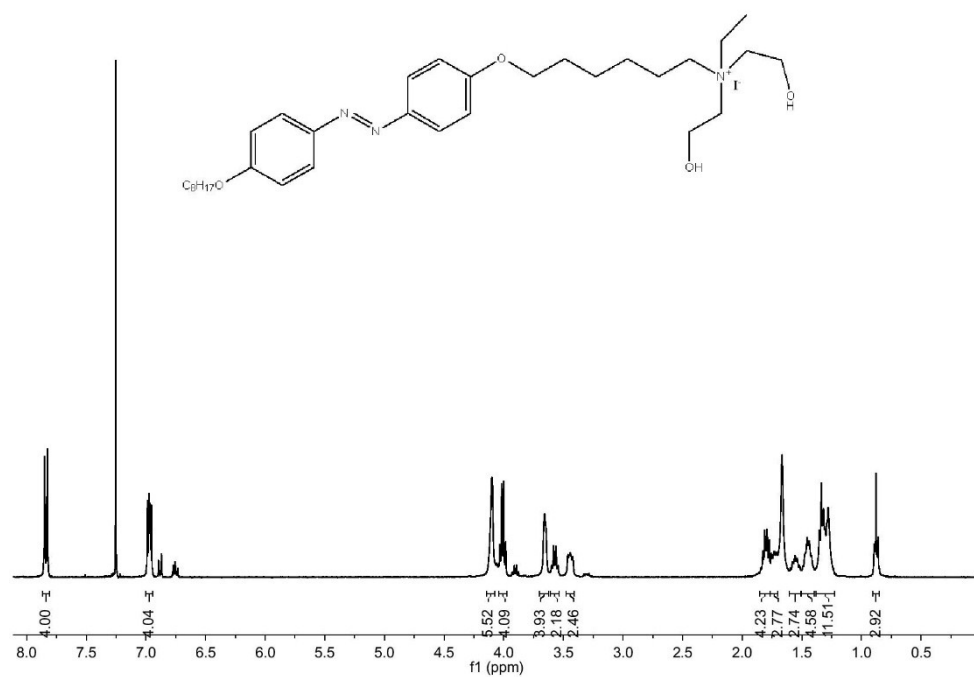


Fig. S19 ¹H NMR graph of compound 23.

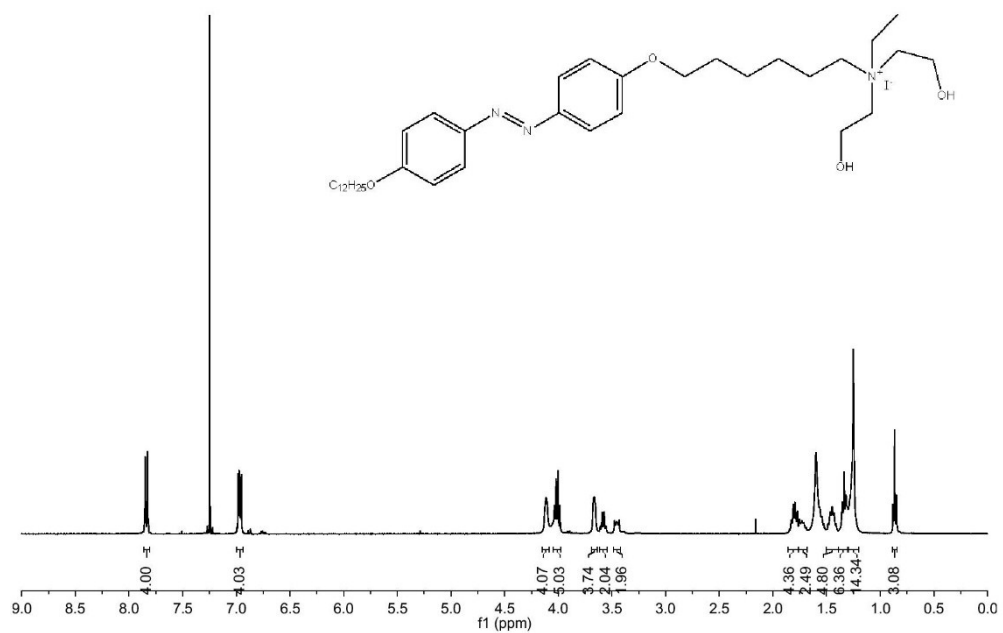


Fig. S20 ¹H NMR graph of compound 24.

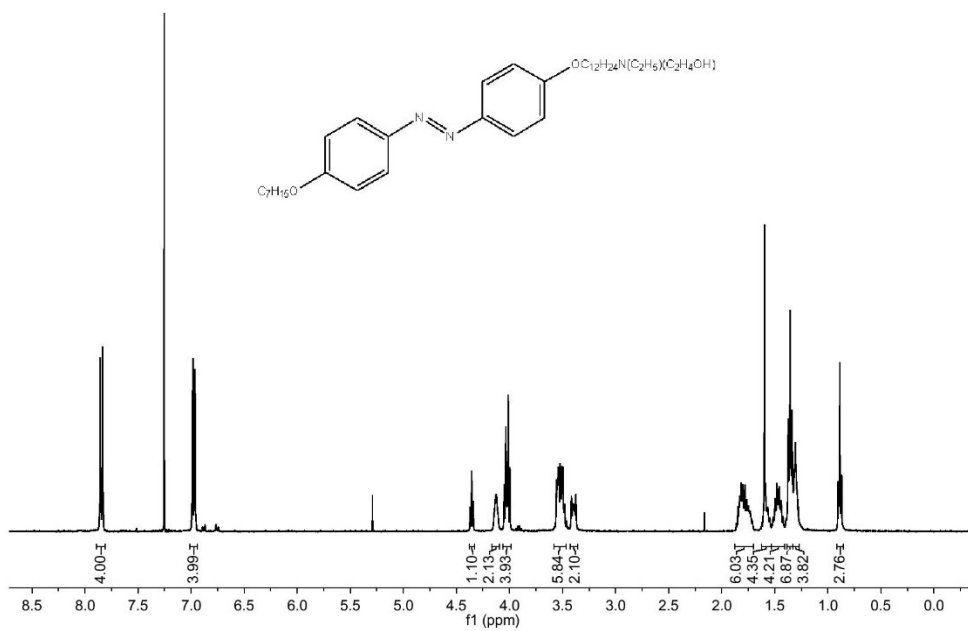


Fig. S21 ¹H NMR graph of compound 25.

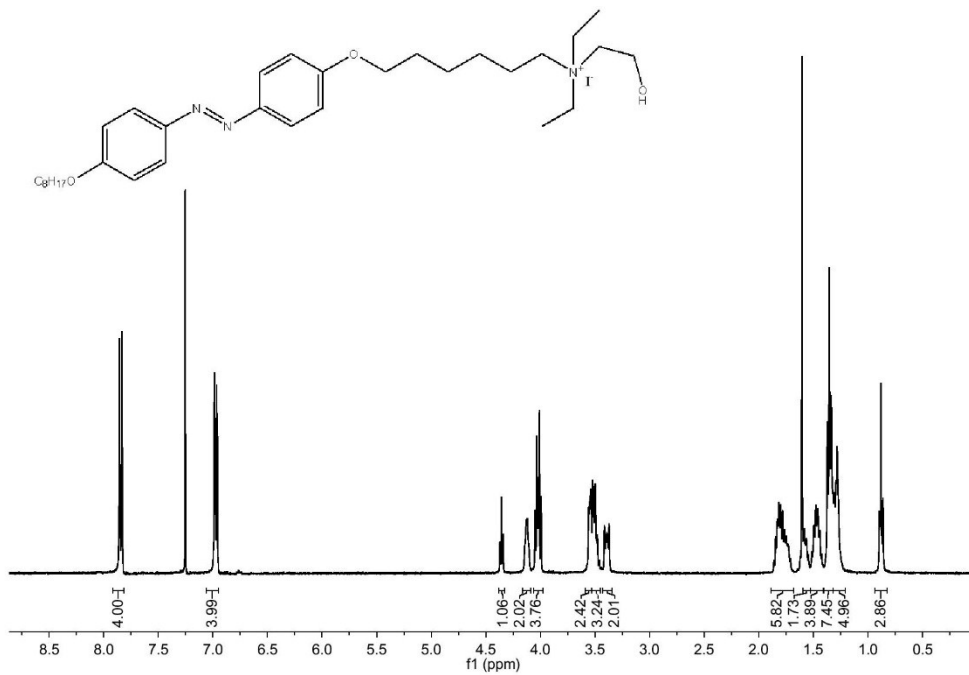


Fig. S22 ¹H NMR graph of compound 26.

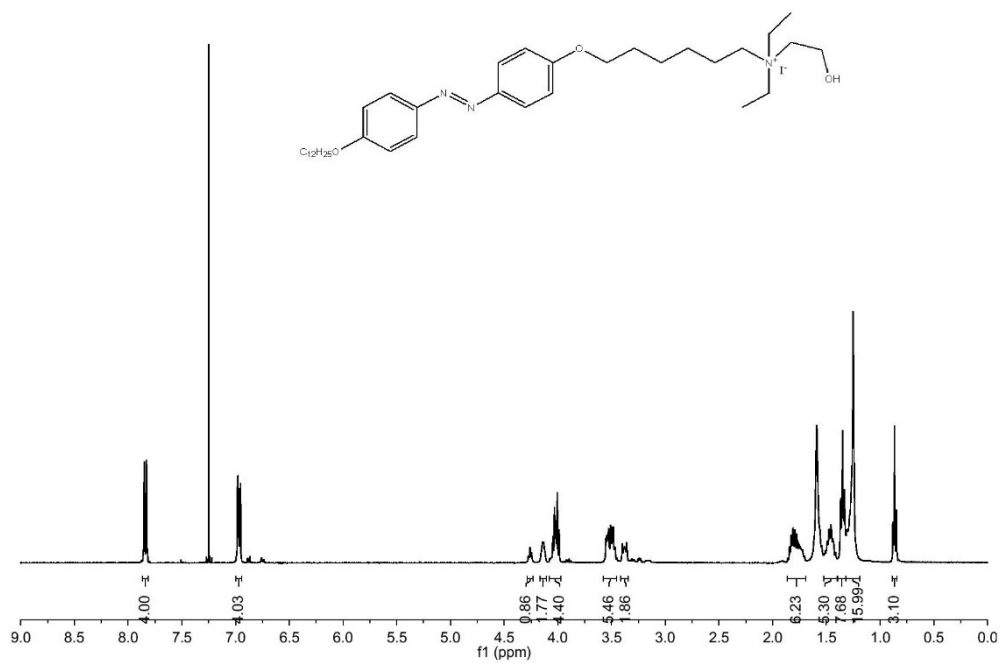


Fig. S23 ¹H NMR graph of compound 27.

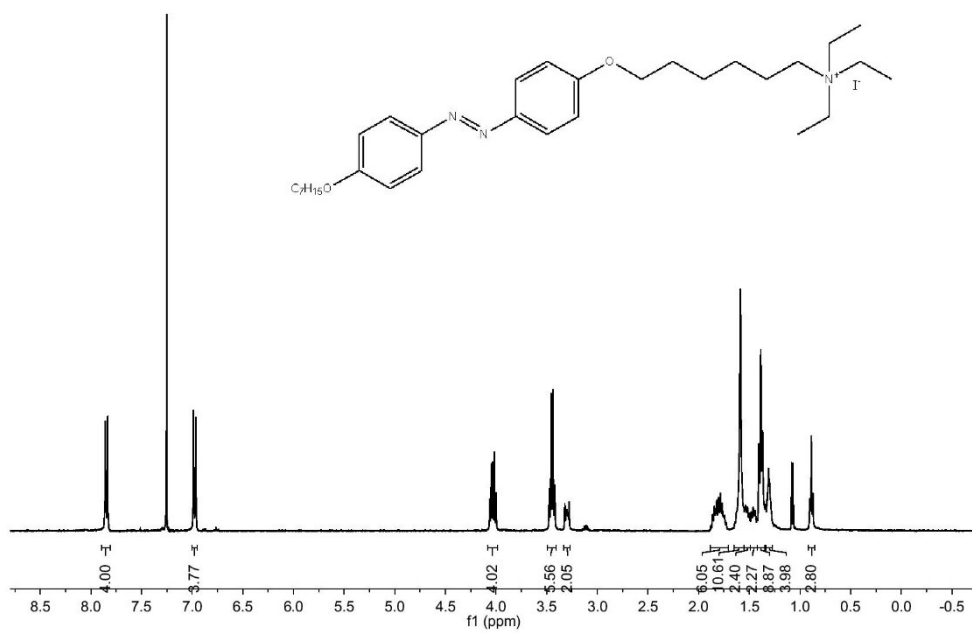


Fig. S24 ¹H NMR graph of compound 28.

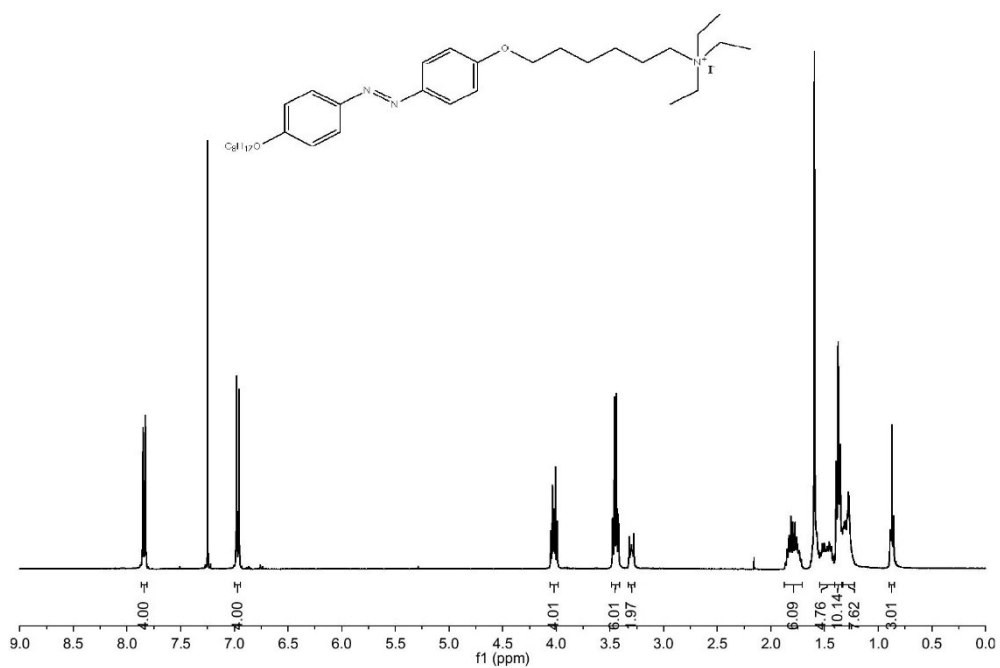


Fig. S25 ¹H NMR graph of compound 29.

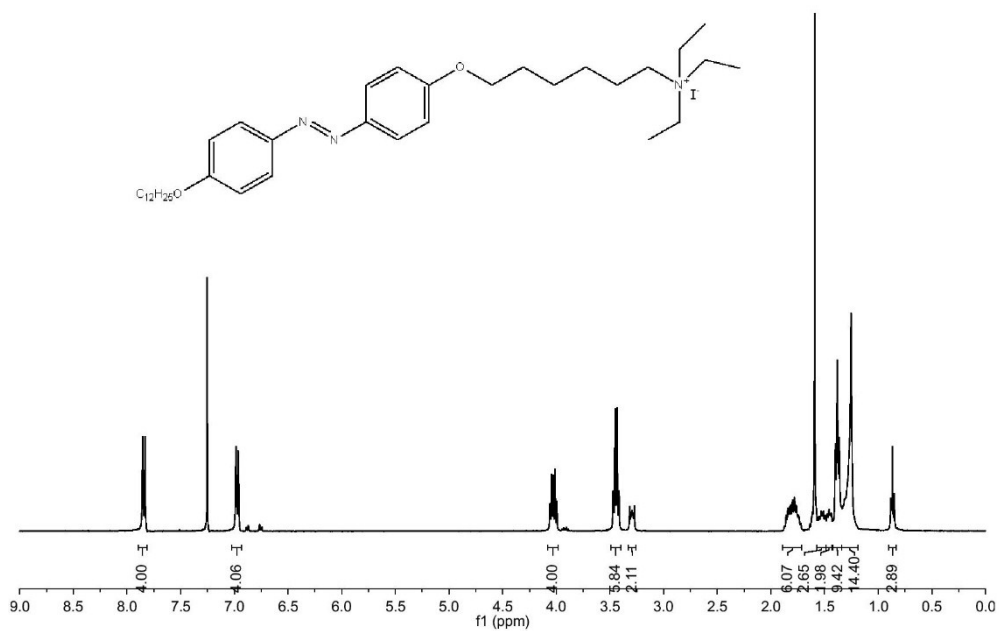


Fig. S26 ¹H NMR graph of compound 30.

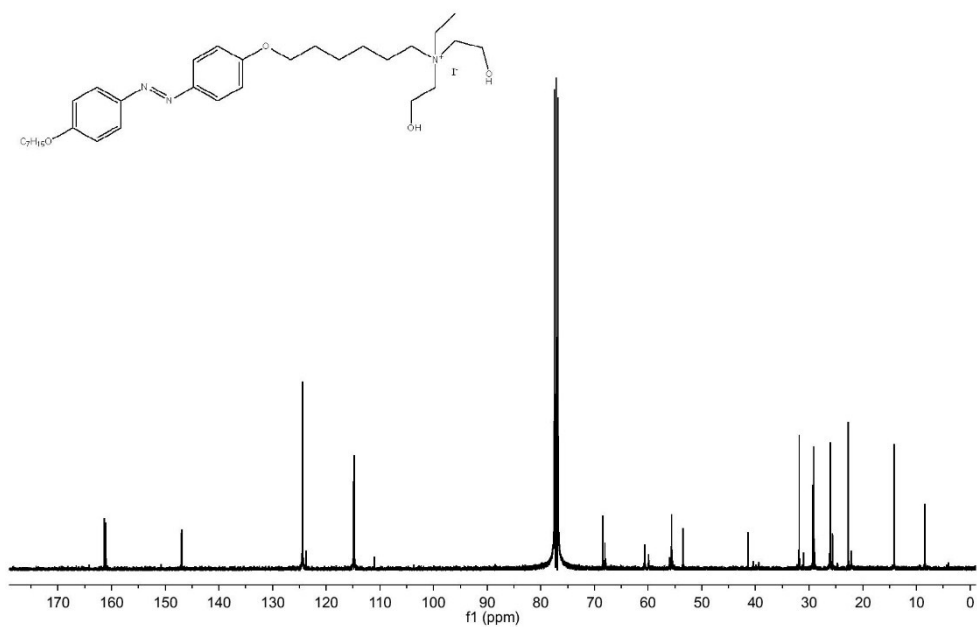


Fig. S27 ¹³C NMR graph of compound 22.

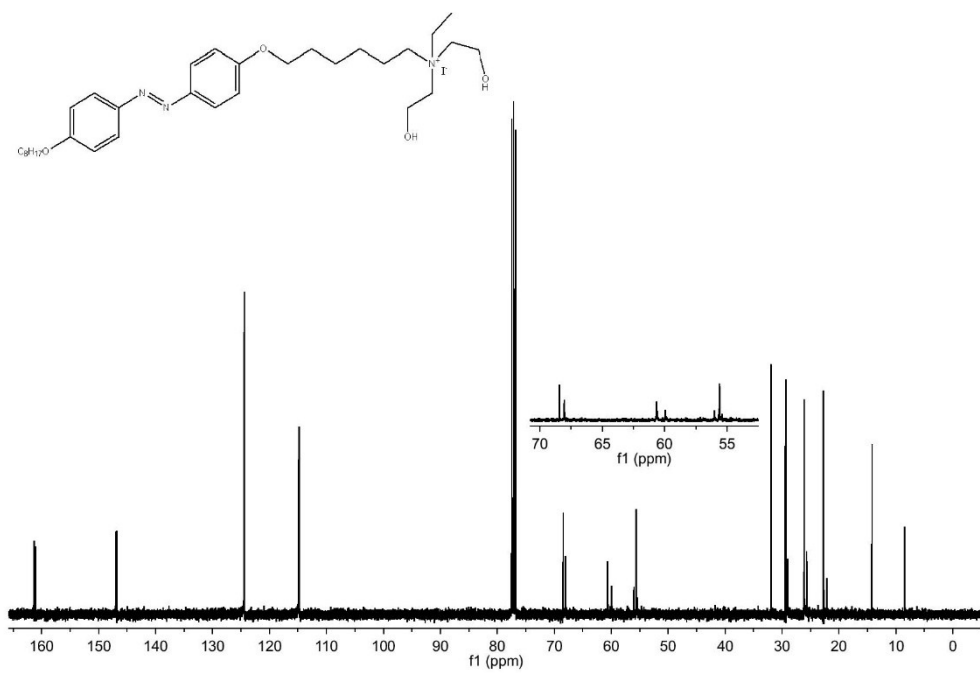


Fig. S28 ¹³C NMR graph of compound 23.

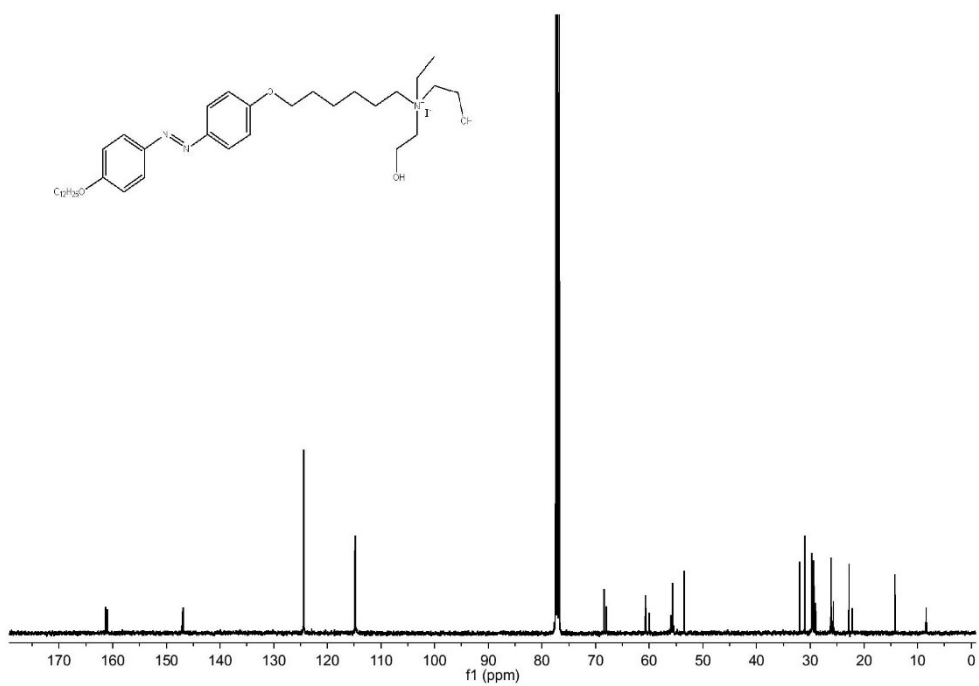


Fig. S29 ¹³C NMR graph of compound 24.

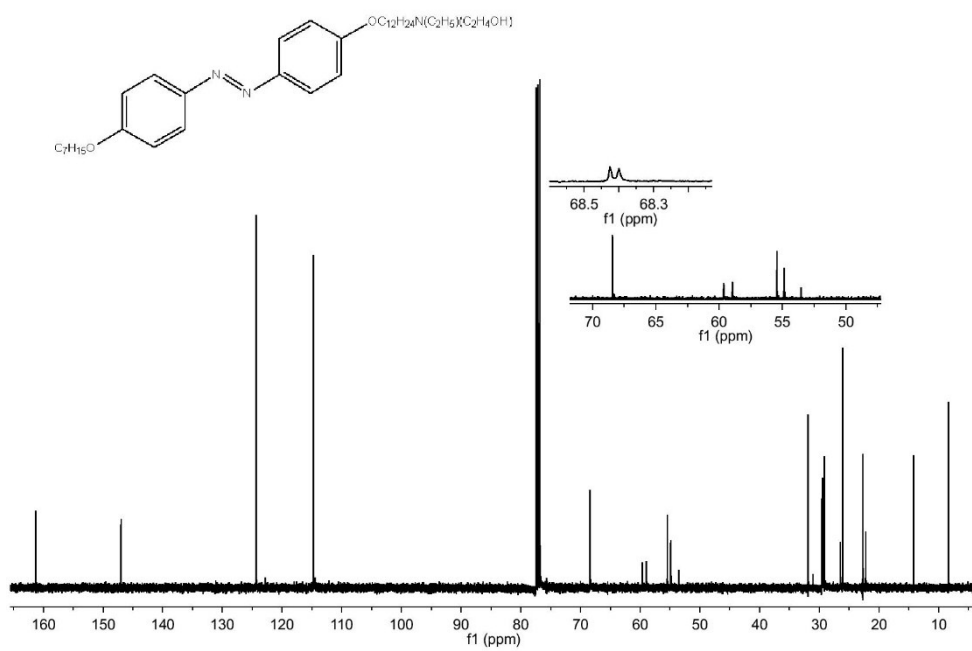


Fig. S30 ¹³C NMR graph of compound 25.

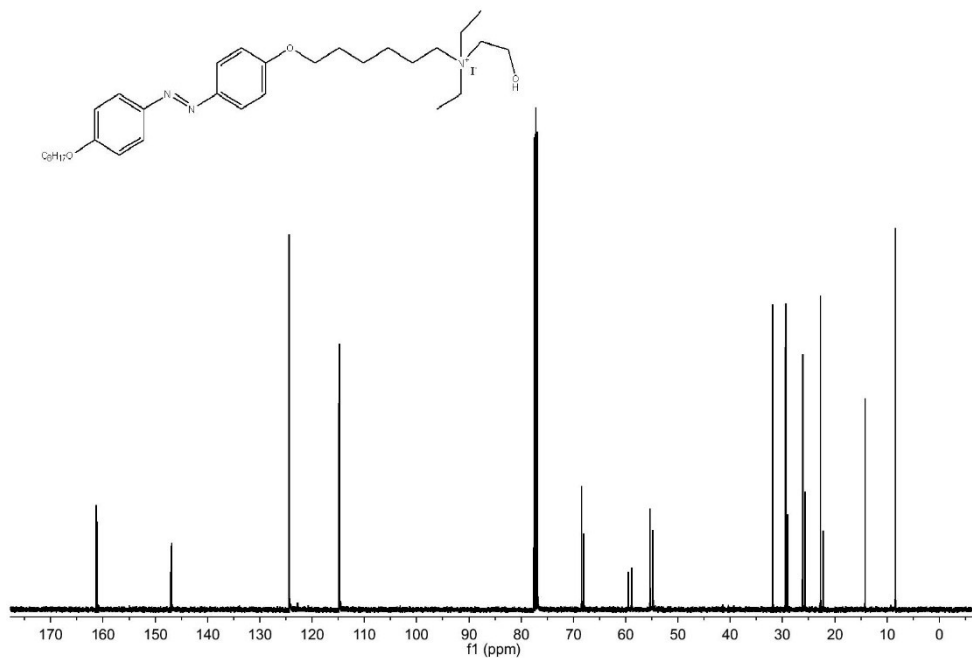


Fig. S31 ¹³C NMR graph of compound 26.

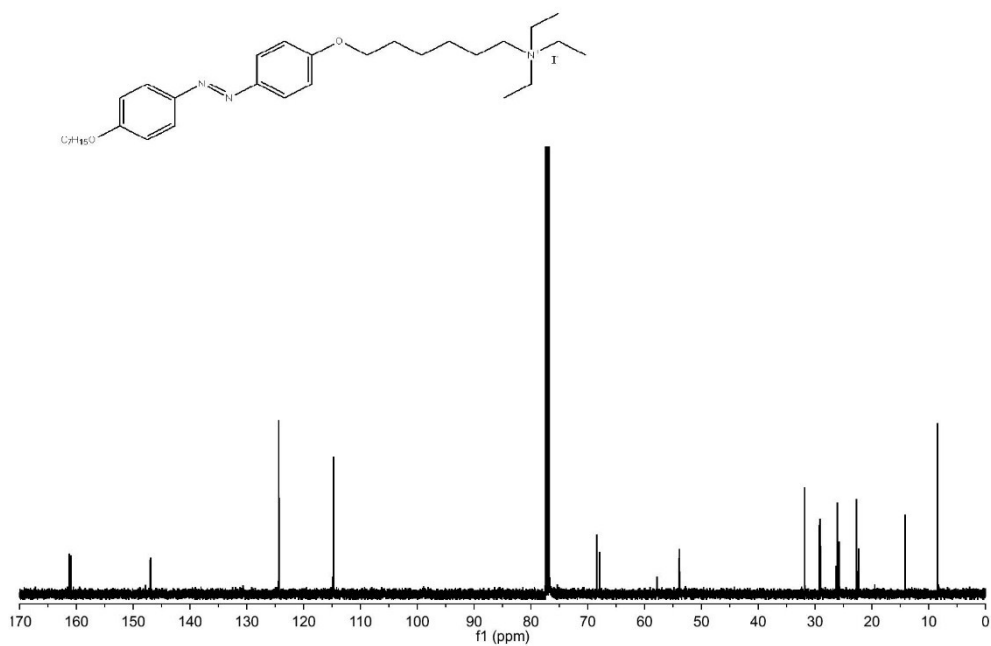


Fig. S32 ¹³C NMR graph of compound 28.

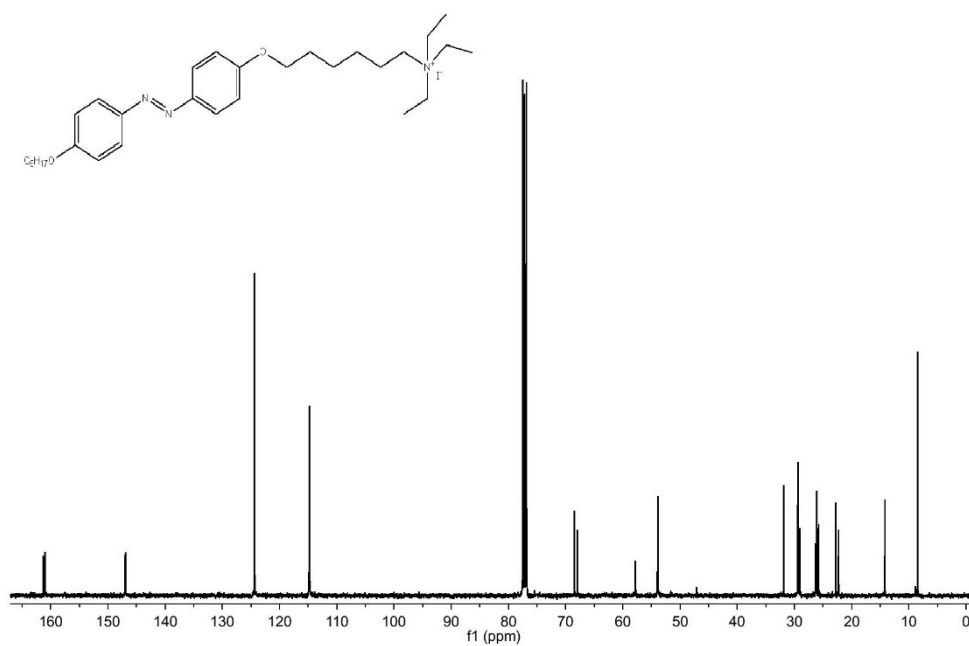


Fig. S33 ¹³C NMR graph of compound 29.

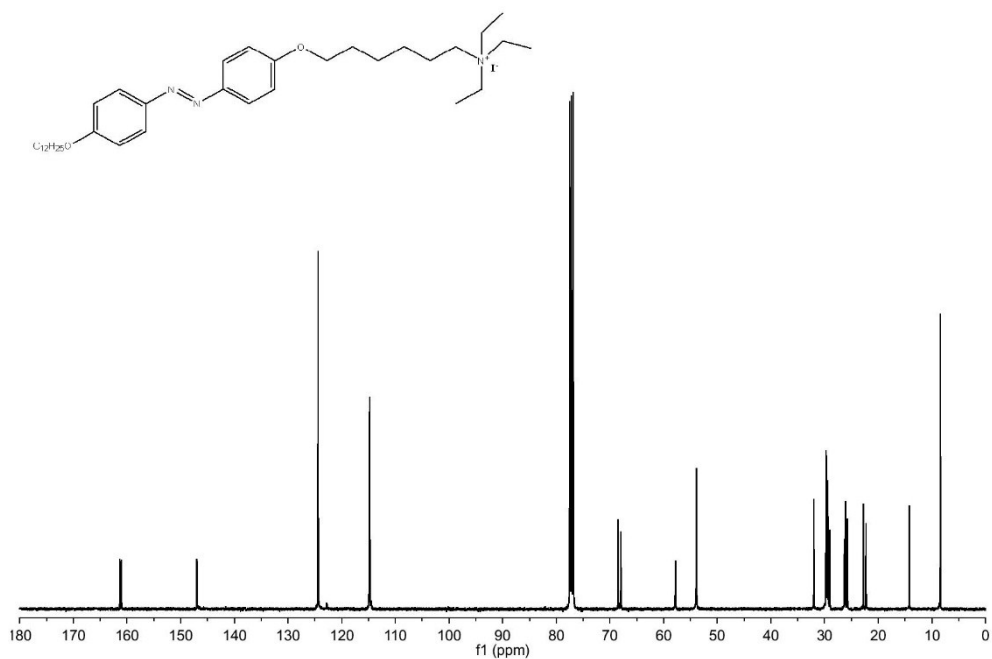


Fig. S34 ^{13}C NMR graph of compound 30.

2. DSC thermograms

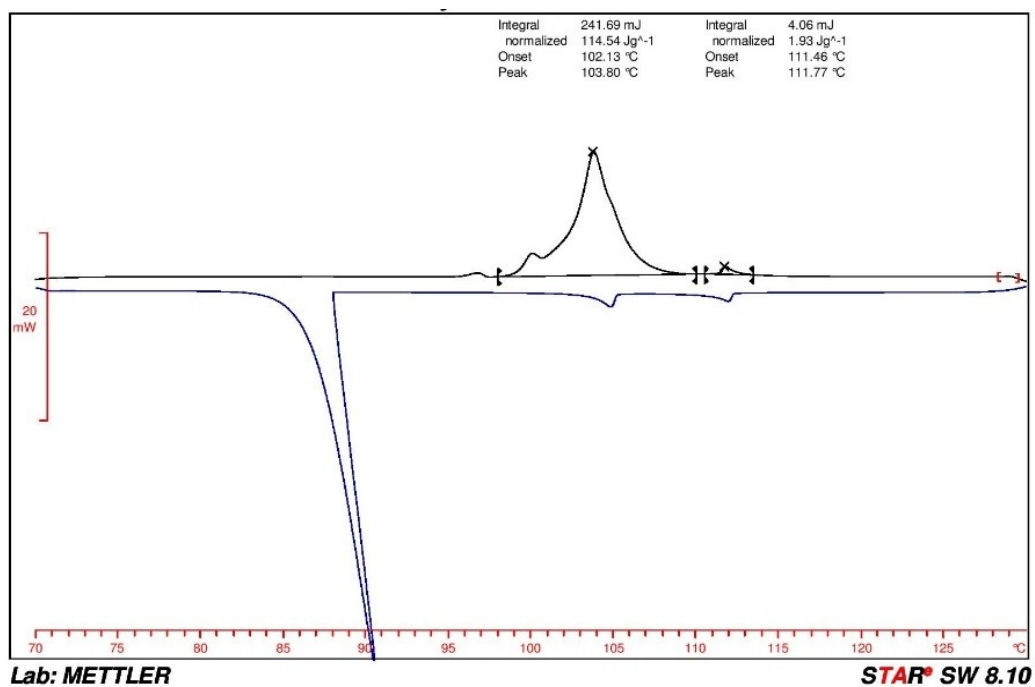


Fig. S35 DSC graph of compound 10.

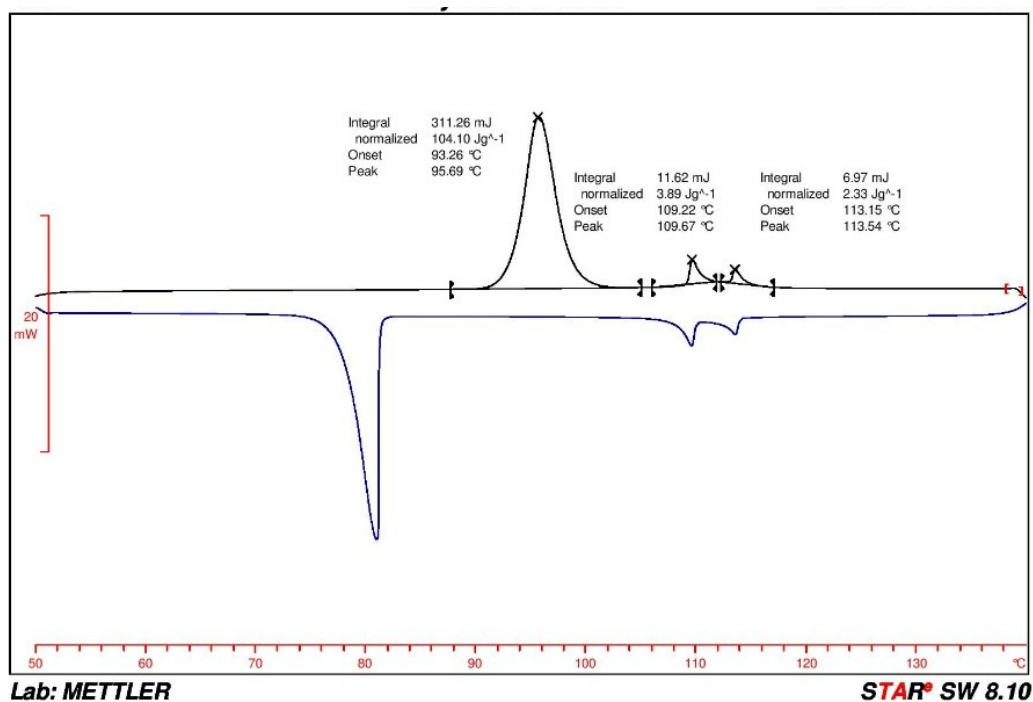


Fig. S36 DSC graph of compound 11.

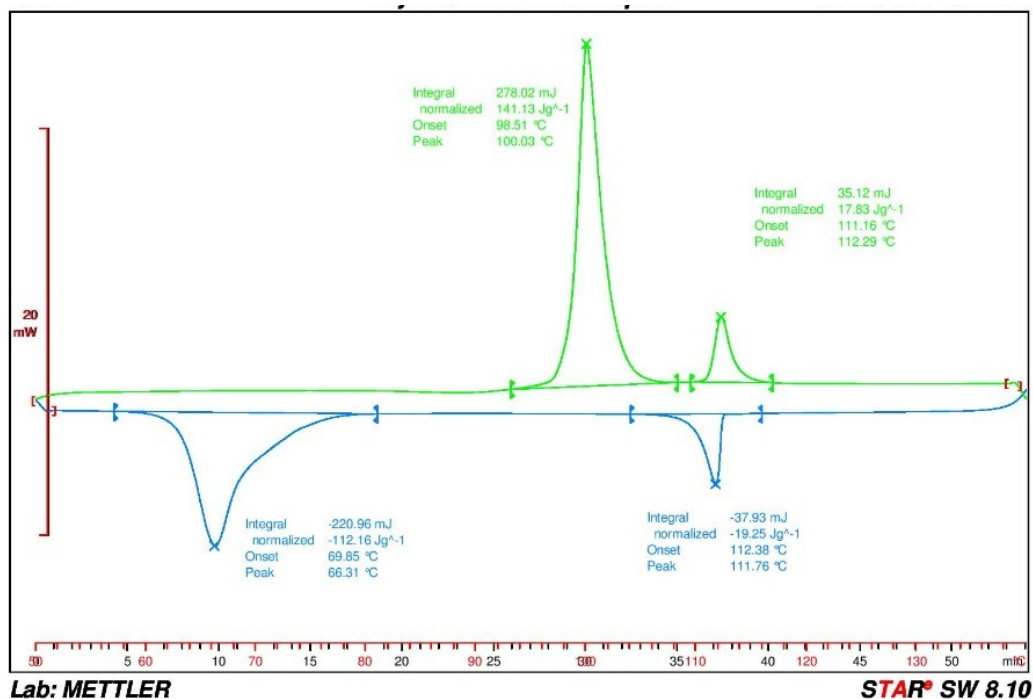


Fig. S37 DSC graph of compound 12.

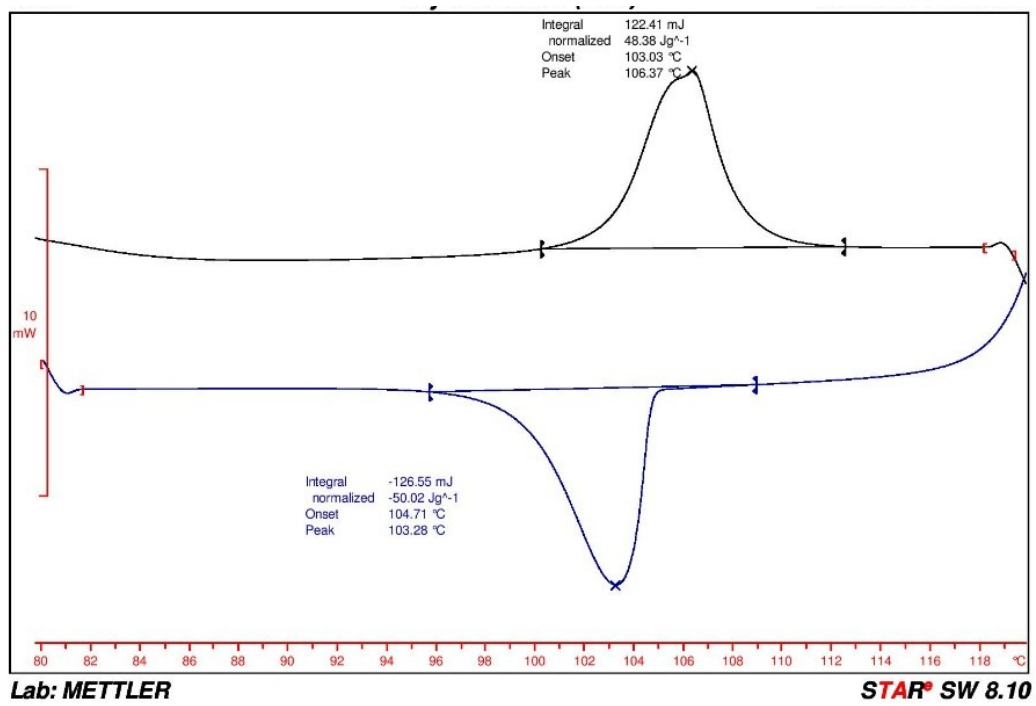


Fig. S38 DSC graph of compound 13.

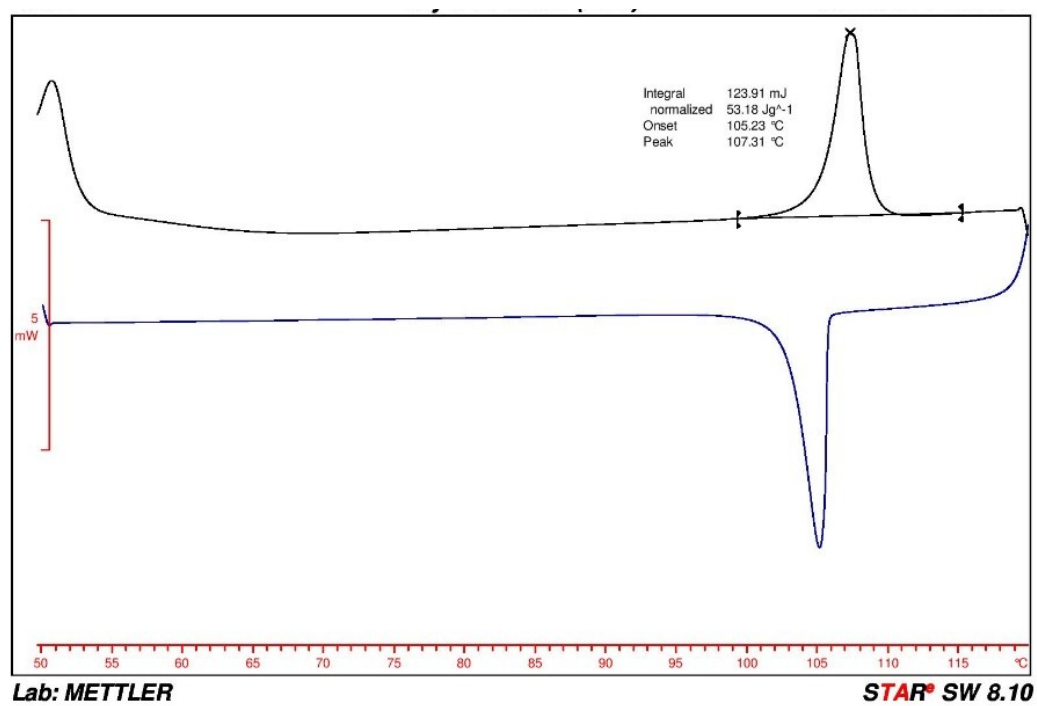


Fig. S39 DSC graph of compound 14.

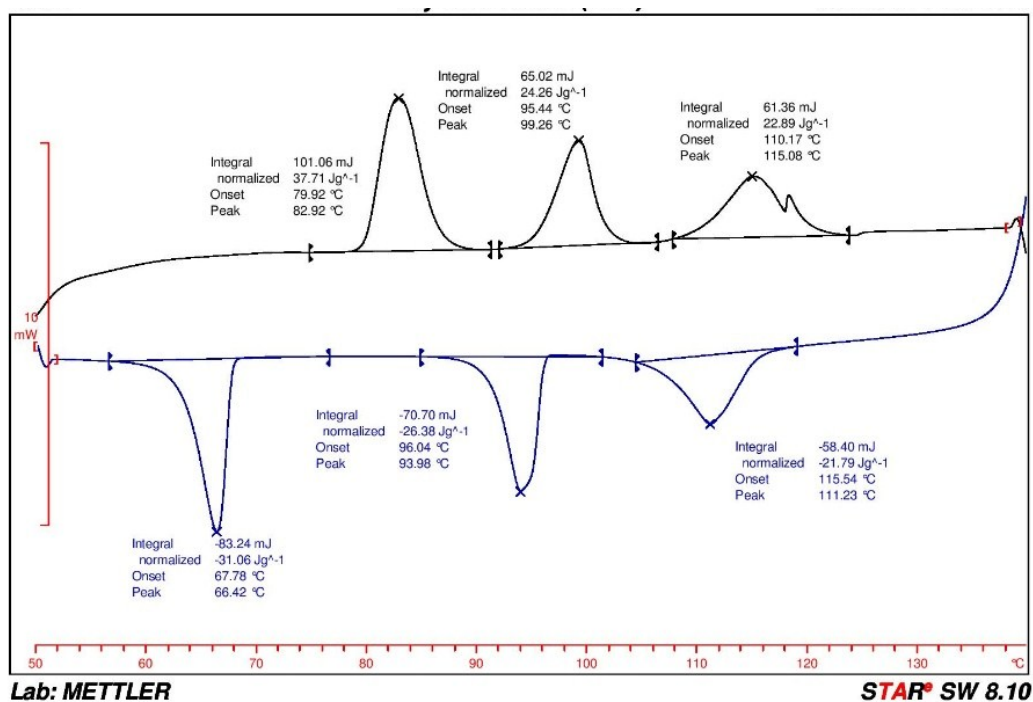


Fig. S40 DSC graph of compound 15.

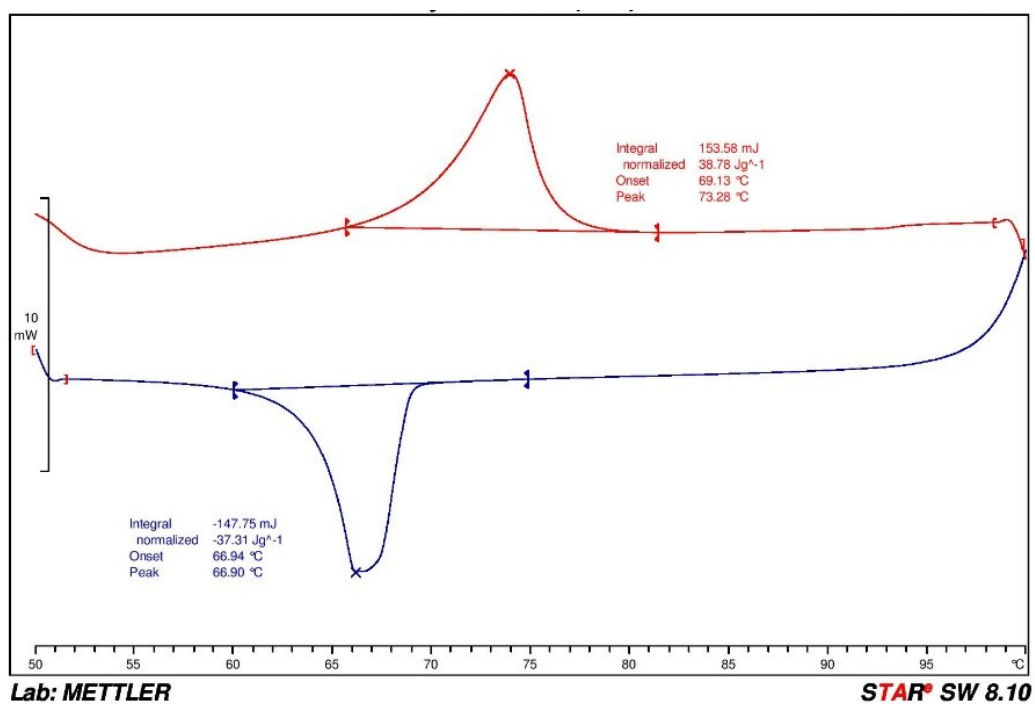


Fig. S41 DSC graph of compound 16.

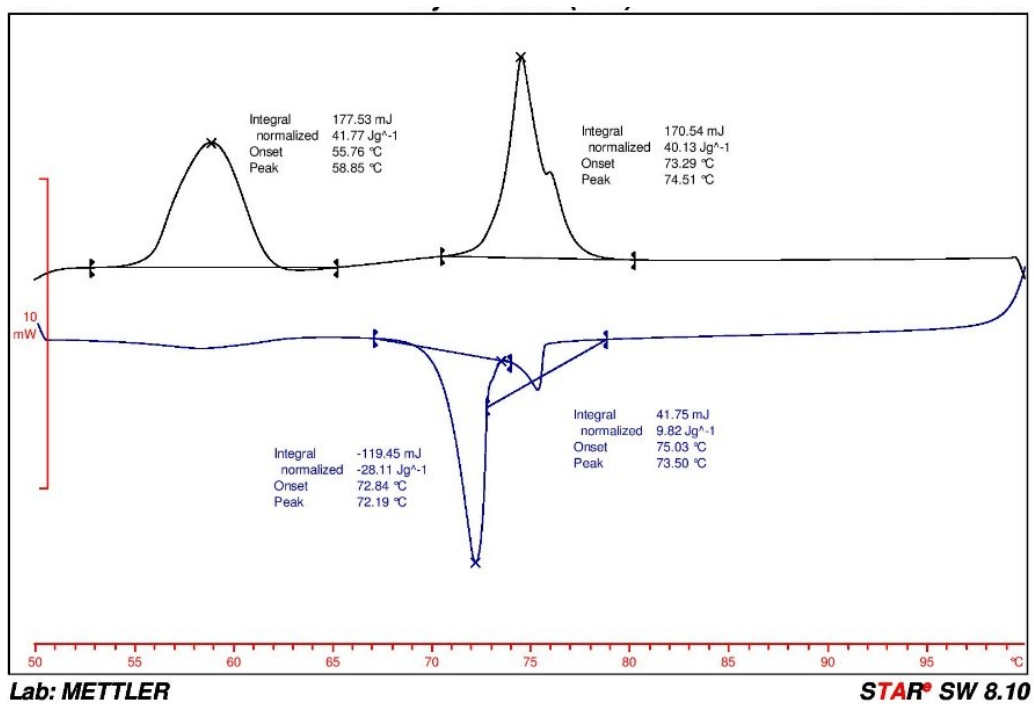


Fig. S42 DSC graph of compound 17.

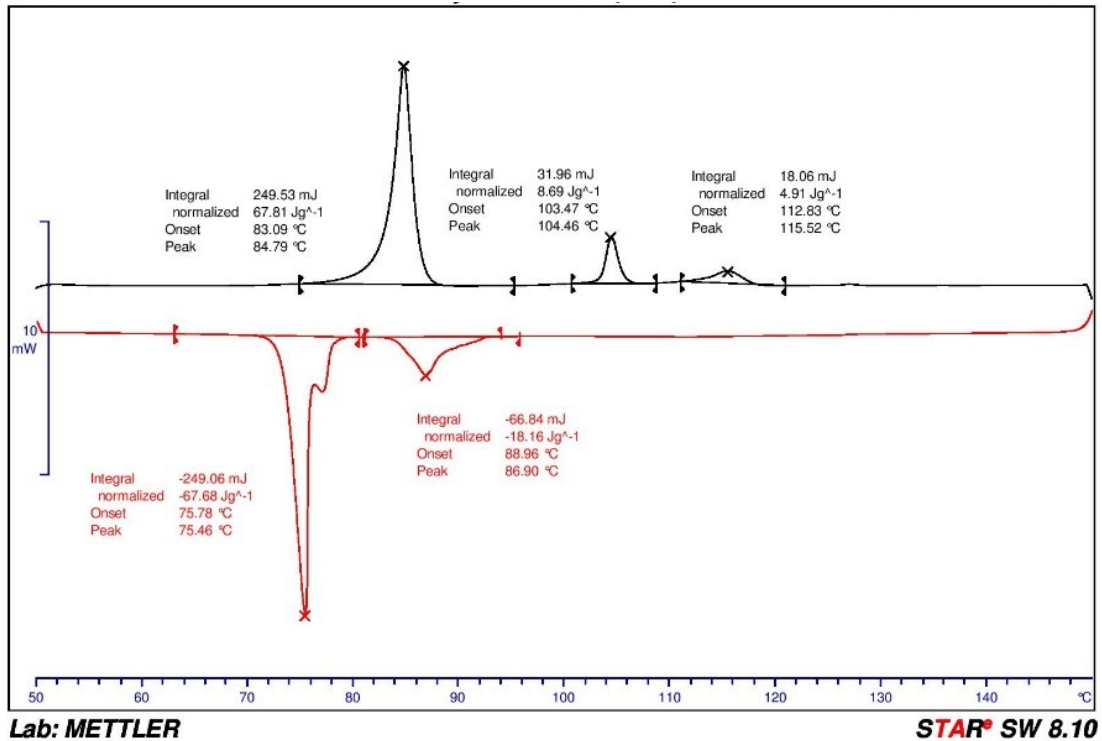


Fig. S43 DSC graph of compound 18.

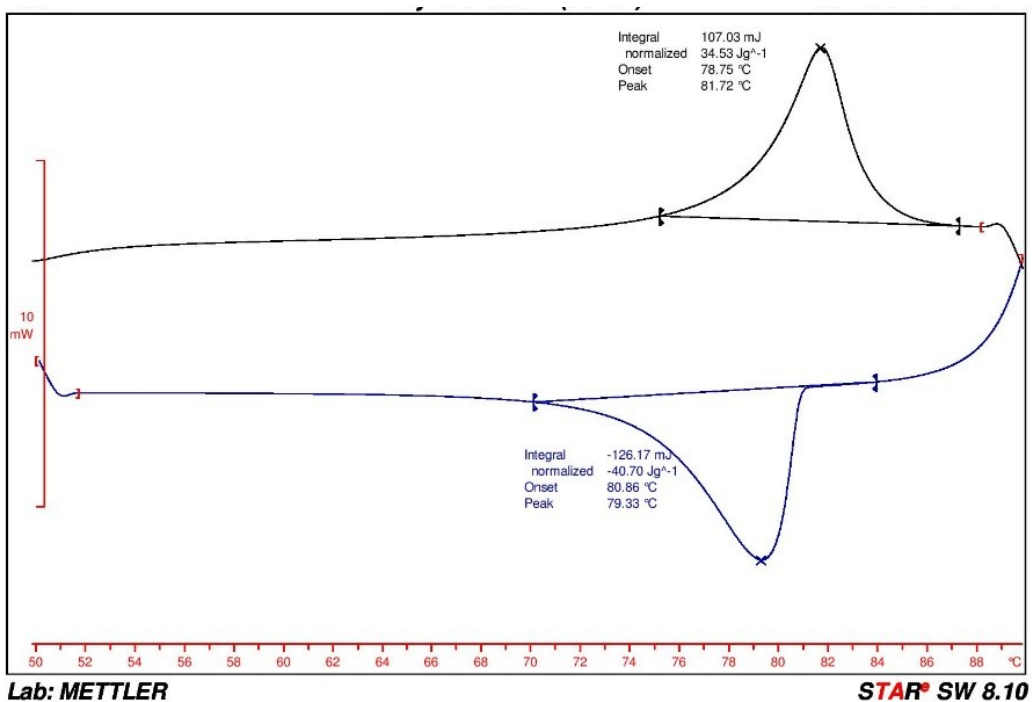


Fig. S44 DSC graph of compound 19.

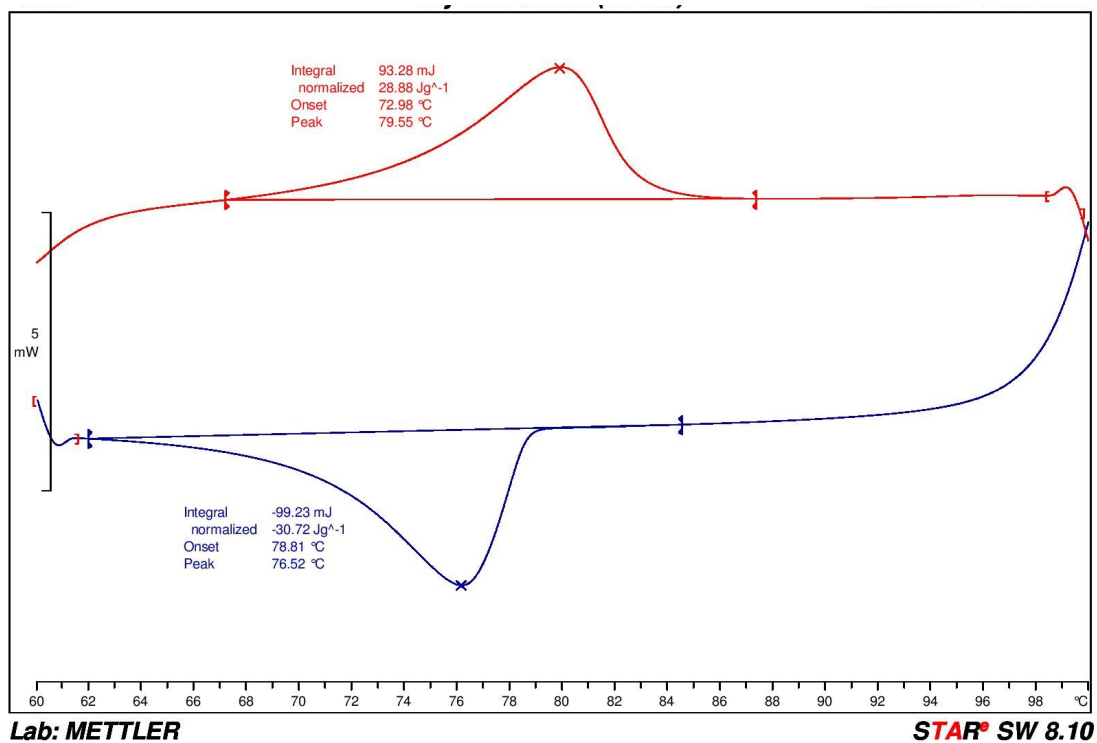


Fig. S45 DSC graph of compound 20.

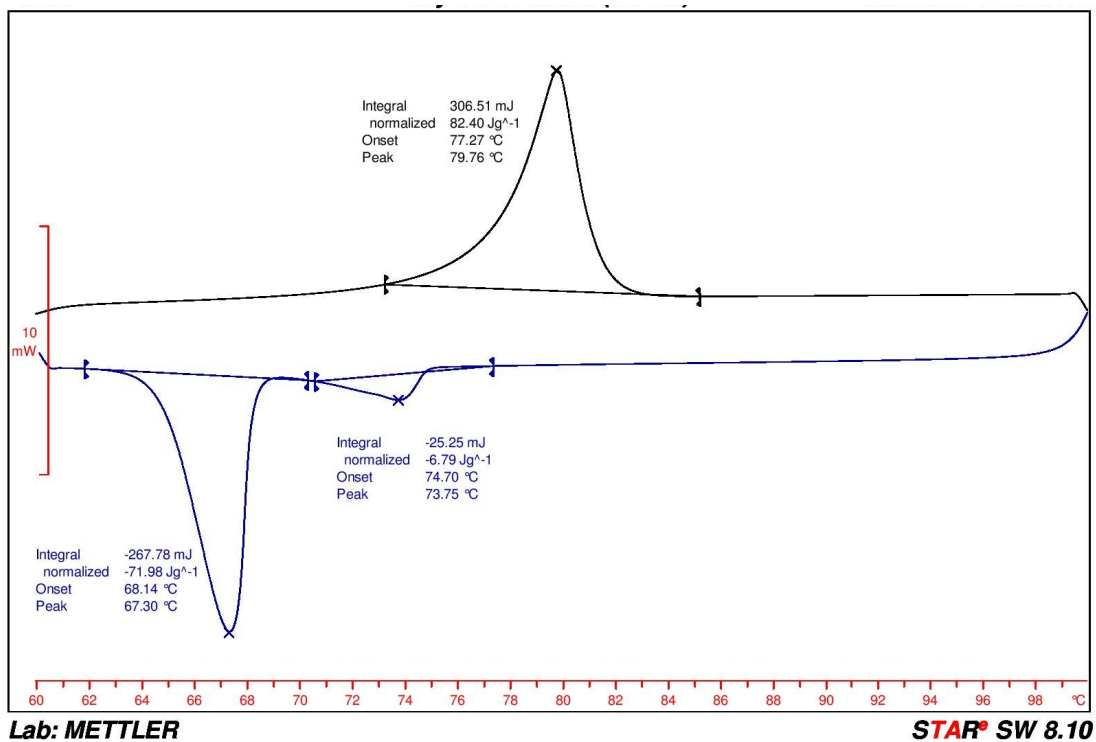


Fig. S46 DSC graph of compound 21.

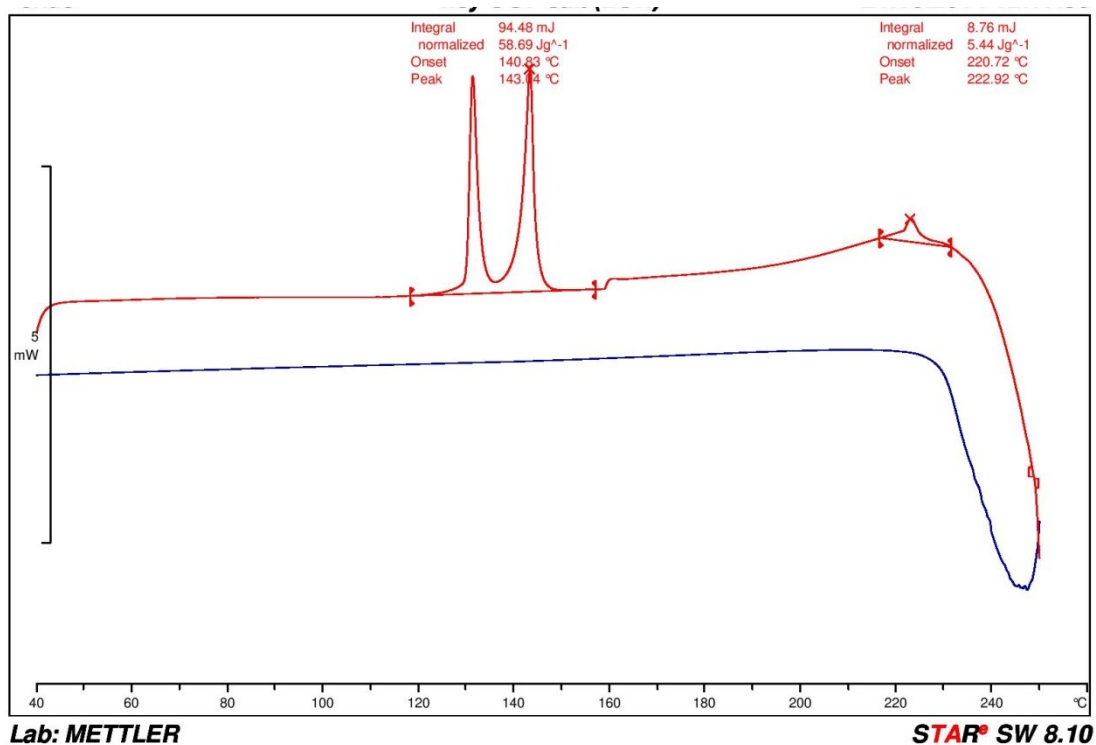


Fig. S47 DSC graph of compound 21.

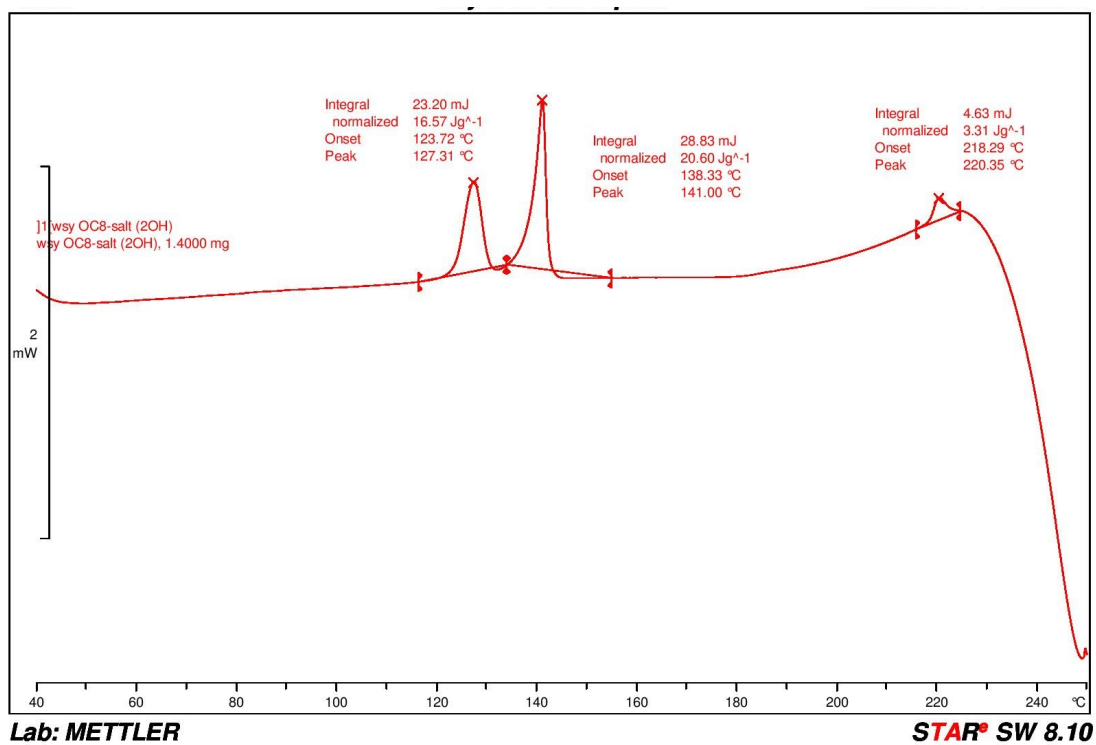


Fig. S48 DSC graph of compound 22.

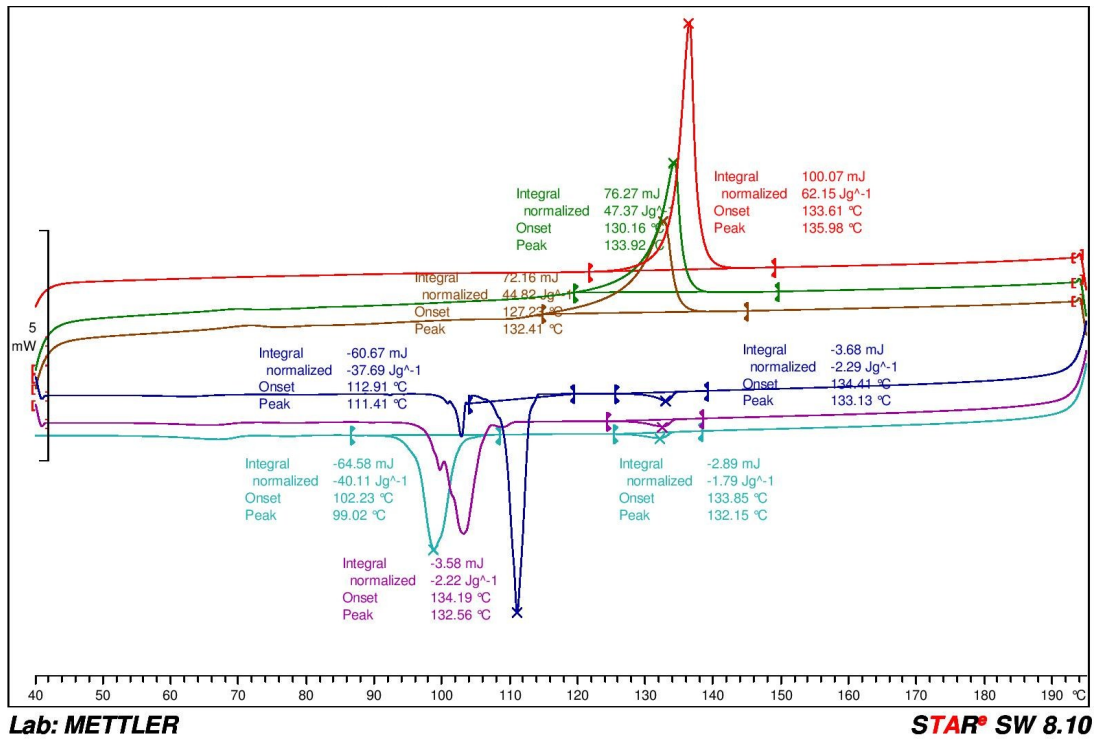


Fig. S49 DSC graph of compound 24.

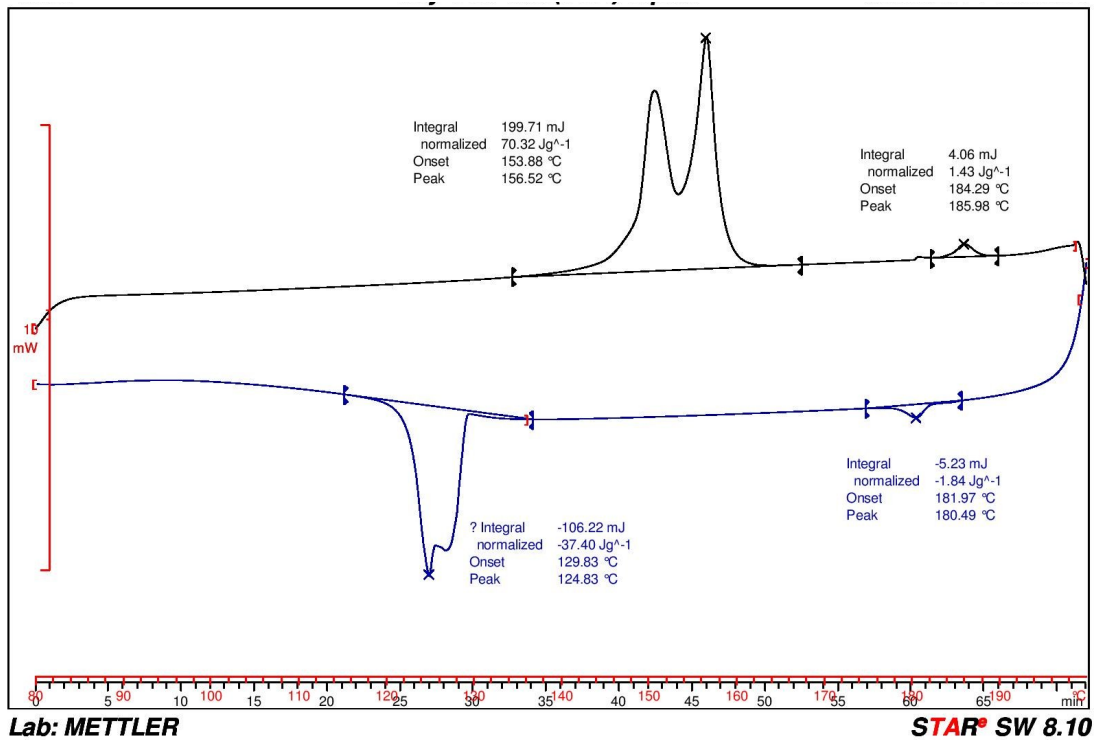


Fig. S50 DSC graph of compound 25.

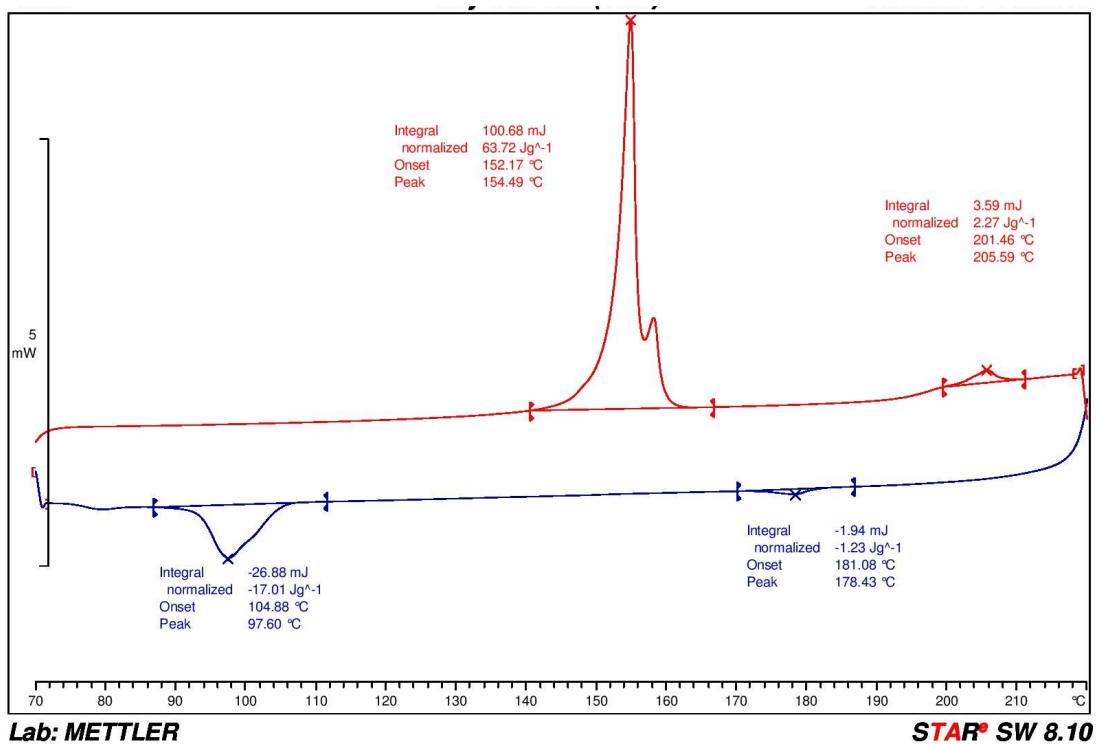


Fig. S51 DSC graph of compound 26.

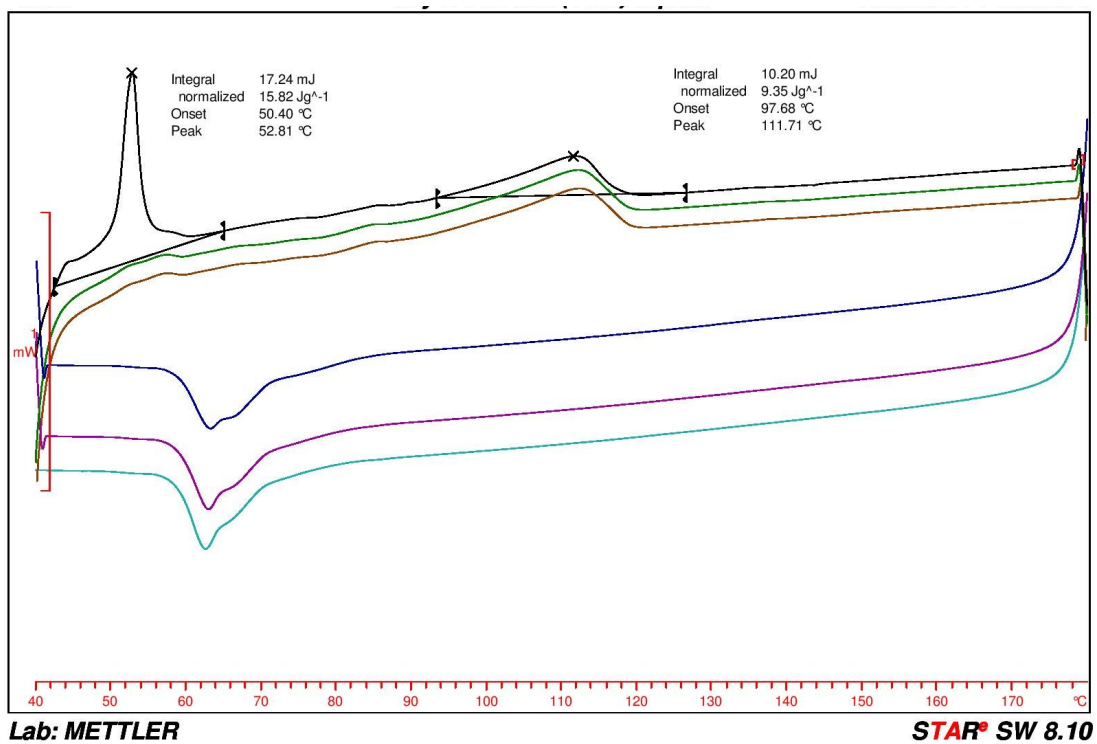


Fig. S52 DSC graph of compound 27.

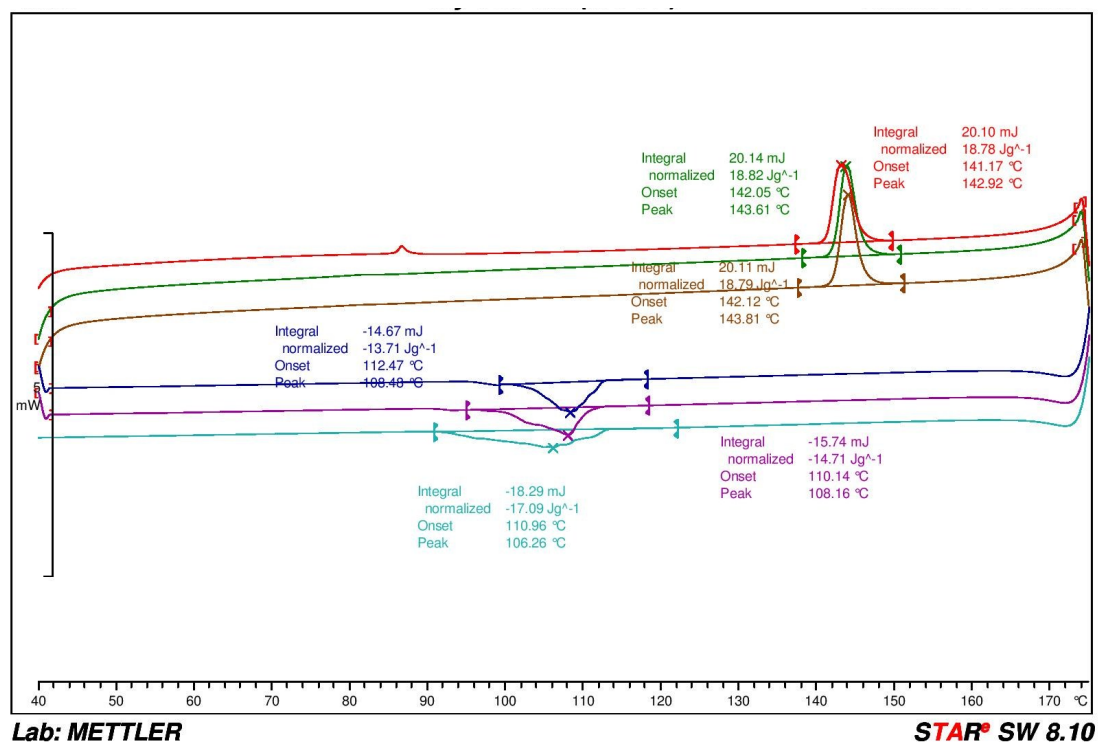


Fig. S53 DSC graph of compound 29.

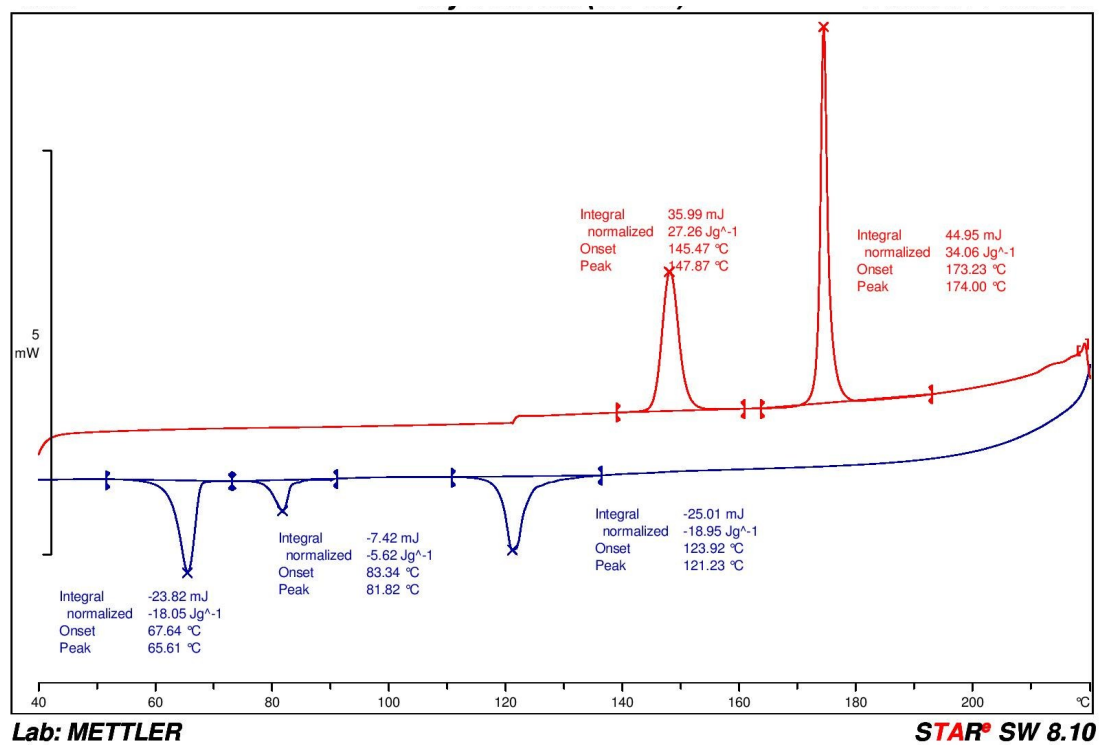


Fig. S54 DSC graph of compound 30.

3. FT-IR Graph