

Electronic supplementary information

## **Molybdenum complexes derived from the oxydianiline [(2-NH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>)<sub>2</sub>O]: Synthesis, characterization and $\epsilon$ -caprolactone ROP capability.**

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**Figure S5** MALDI-TOF spectrum of PCL from run 10 (Table 1).

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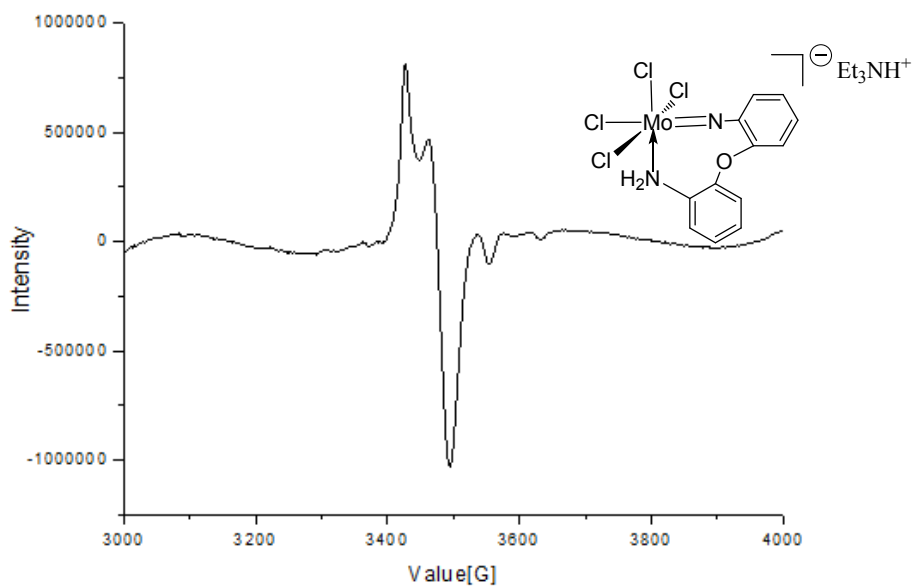
**Figure S7** <sup>1</sup>H NMR spectrum of the PCL from run 10 (Table 1).

**Figure S8** <sup>1</sup>H NMR spectrum of the PCL from run 18 (Table 1).

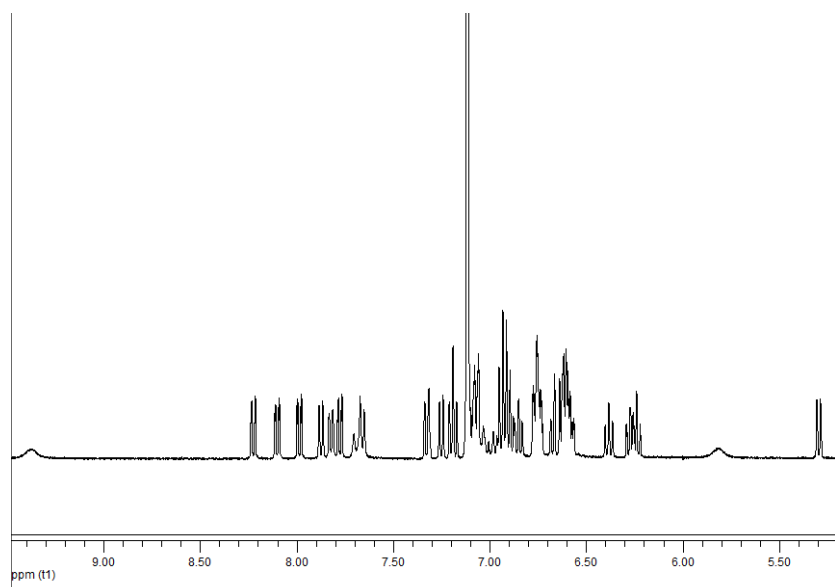
**Figure S9** <sup>13</sup>C NMR spectrum of the PCL from run 10 (Table 1).

**Figure S10** <sup>13</sup>C NMR spectrum of the PCL from run 18 (Table 1).

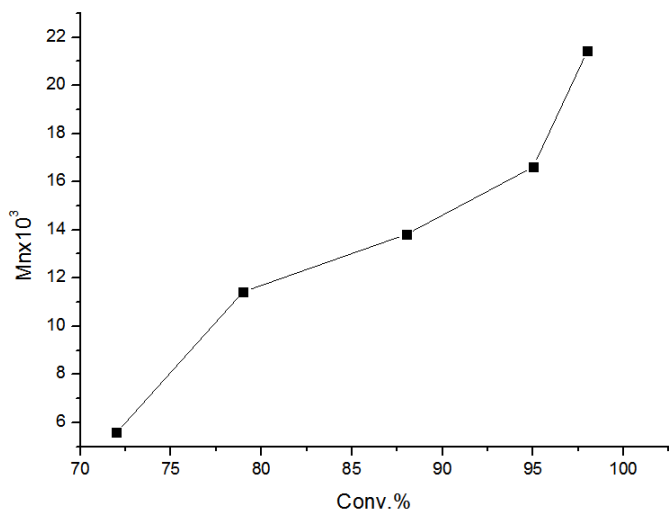
**Figure S11** MALDI-TOF spectrum of PCL from run 21 (Table 1).



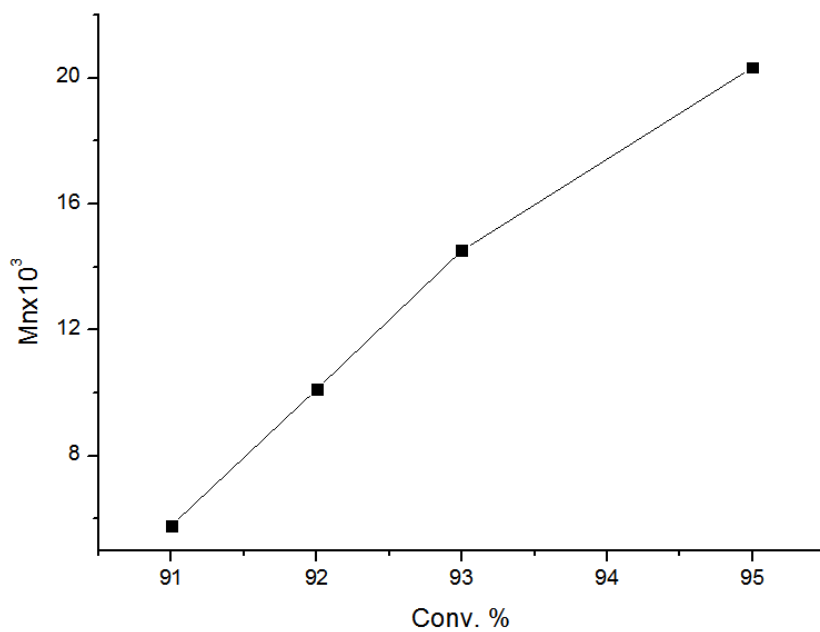
**Figure S1.** X-band EPR spectrum of **2** (solid at 110 K).



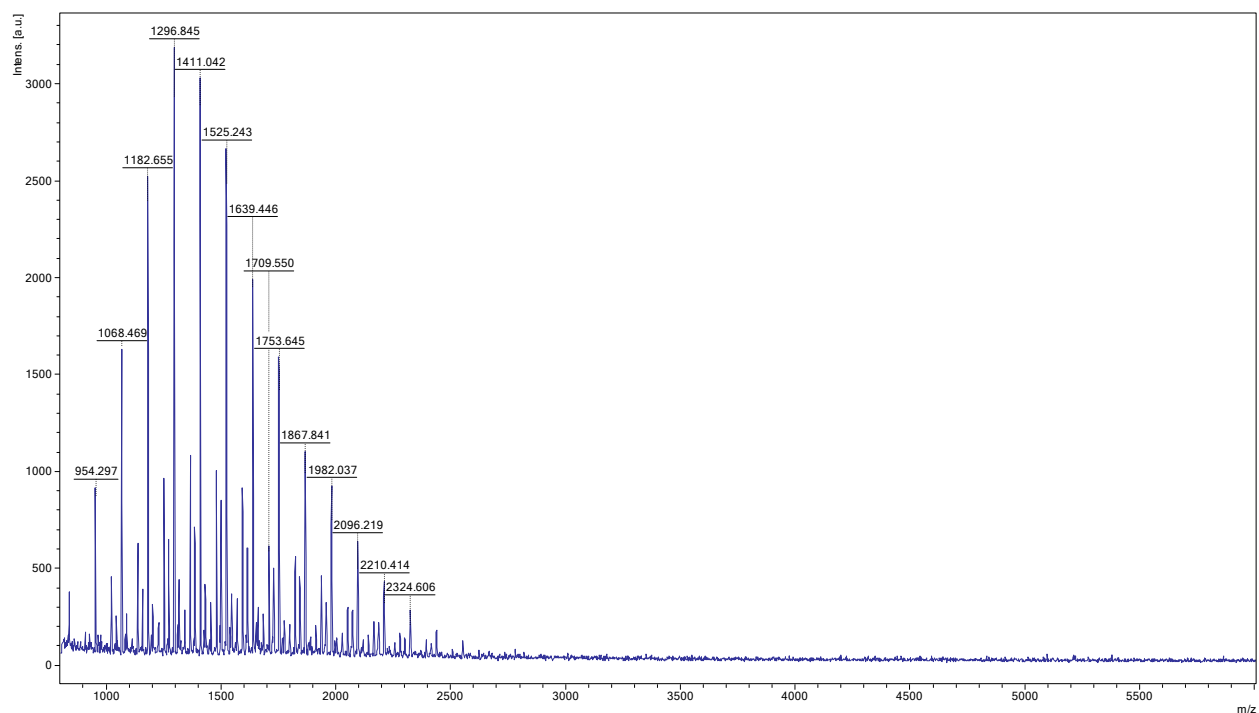
**Figure S2**  $^1\text{H}$  NMR spectrum of **3** (low field region).



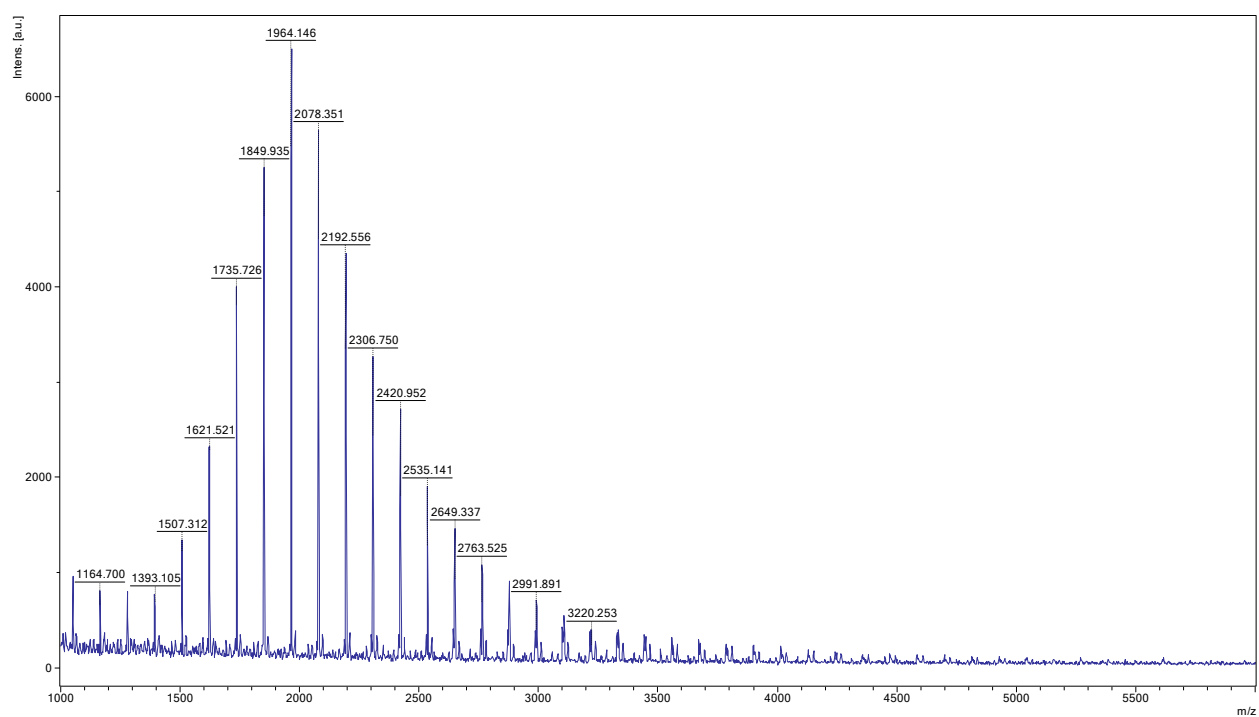
**Figure S3** Plot of monomer conversion *versus* number average molecular weight for **1** (entries 2, 4–7, Table 1).



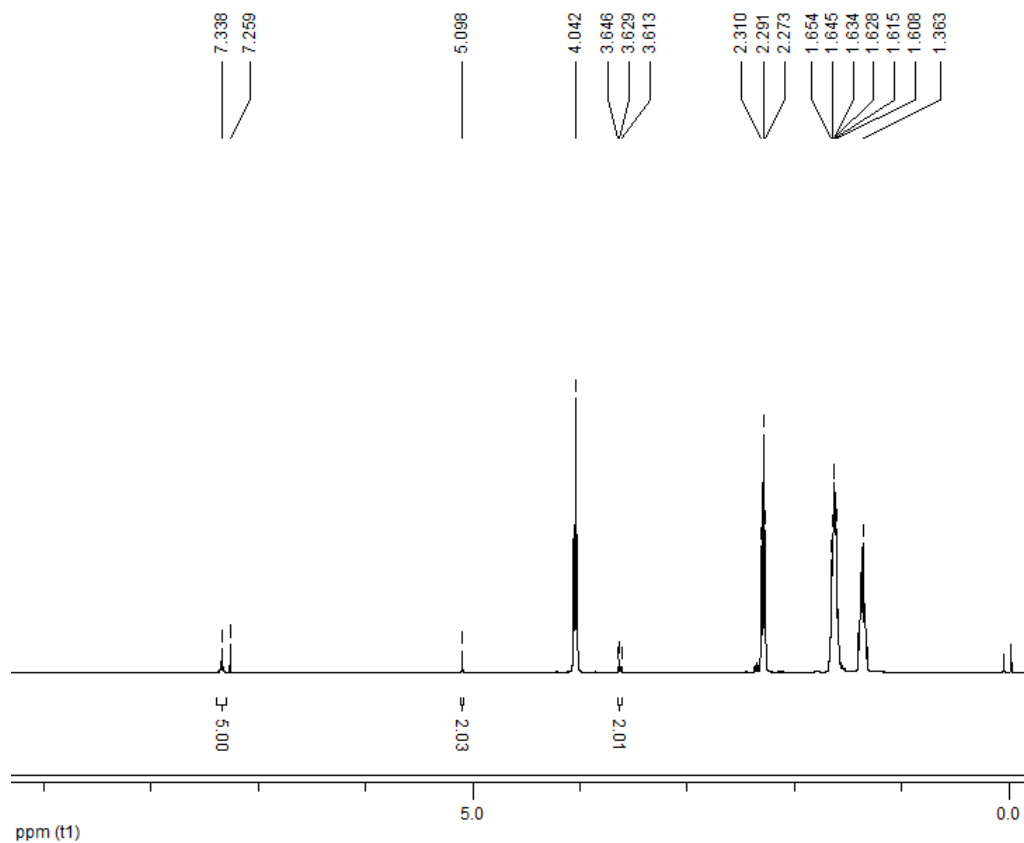
**Figure S4** Plot of monomer conversion *versus* number average molecular weight for **3** (entries 13, 15–17, Table 1).



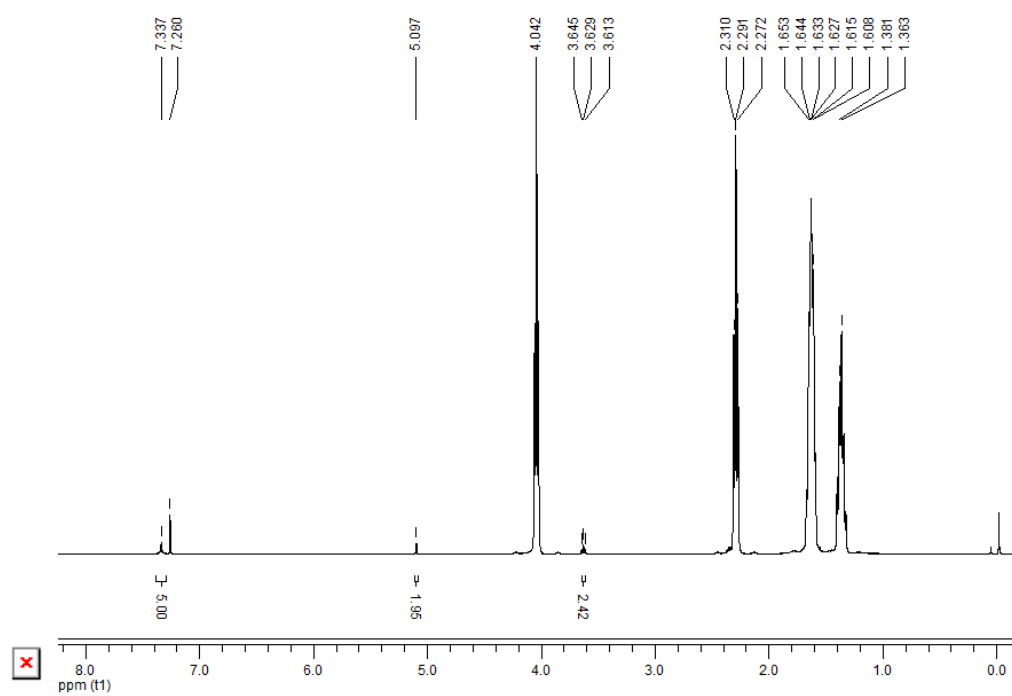
**Figure S5.** MALDI-TOF spectrum of the PCL from run 10, table 1 (complex 2).



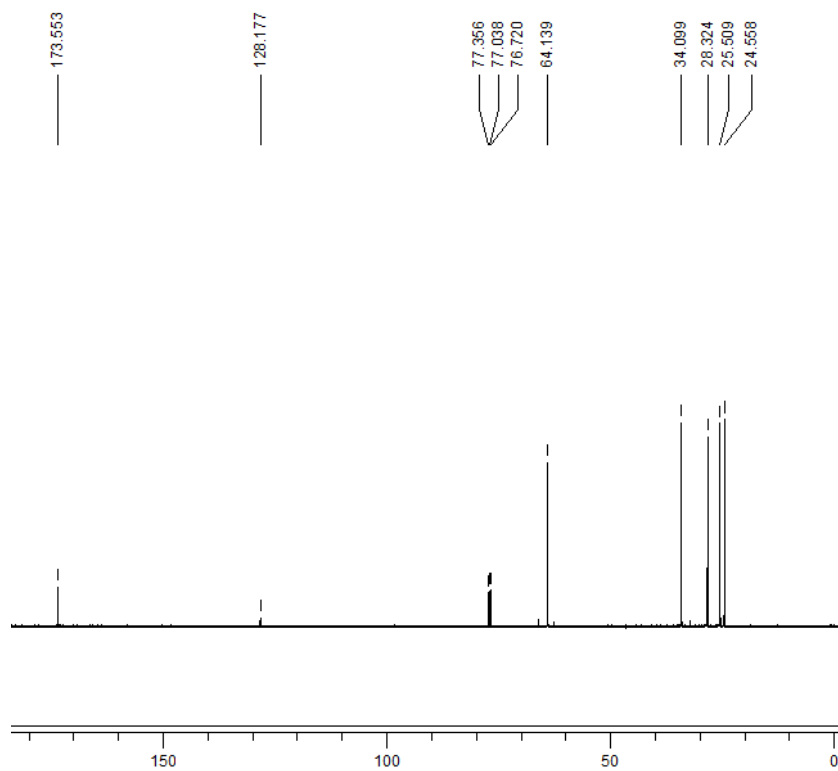
**Figure S6.** MALDI-TOF spectrum of the PCL from run 18, table 1 (complex 3).



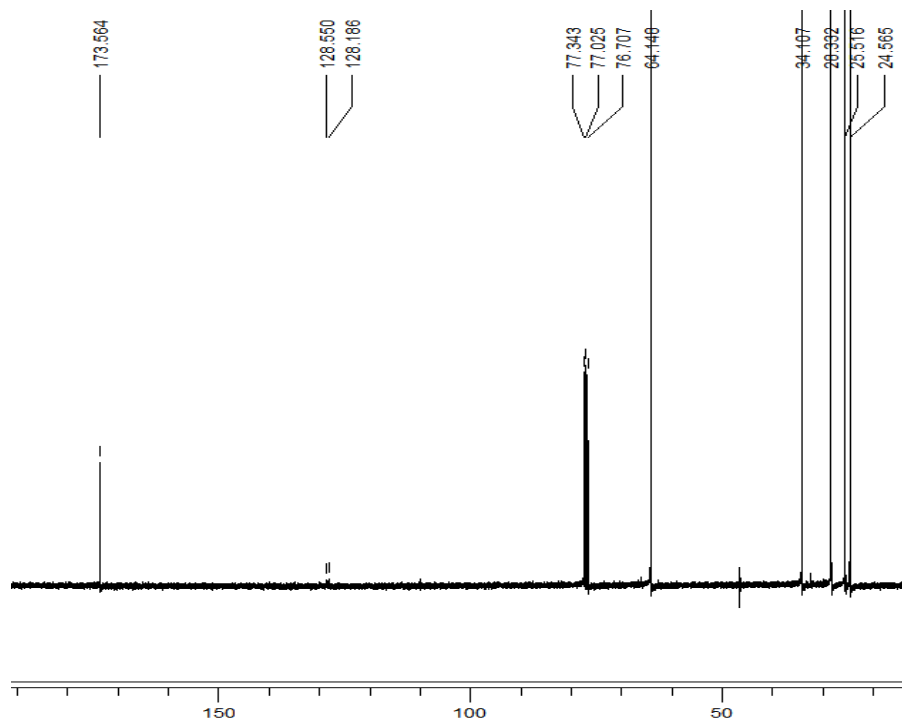
**Figure S7**  $^1\text{H}$  NMR spectrum ( $\text{CDCl}_3$ , 400 MHz) of the PCL from run 10 (Table 1).



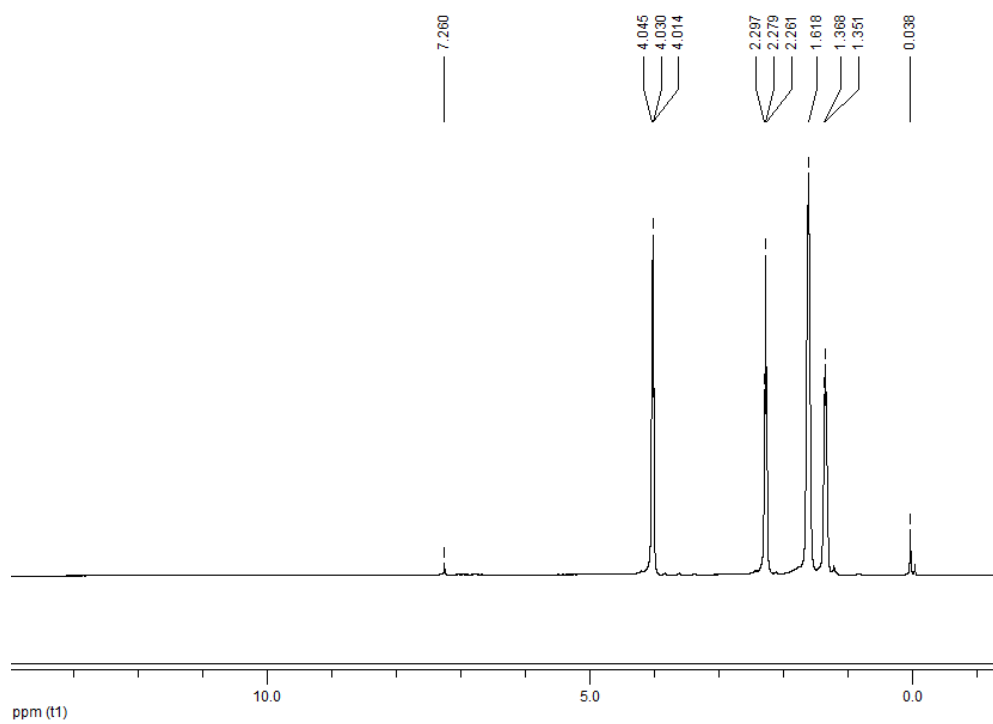
**Figure S8**  $^1\text{H}$  NMR spectrum ( $\text{CDCl}_3$ , 400 MHz) of the PCL from run 18 (Table 1).



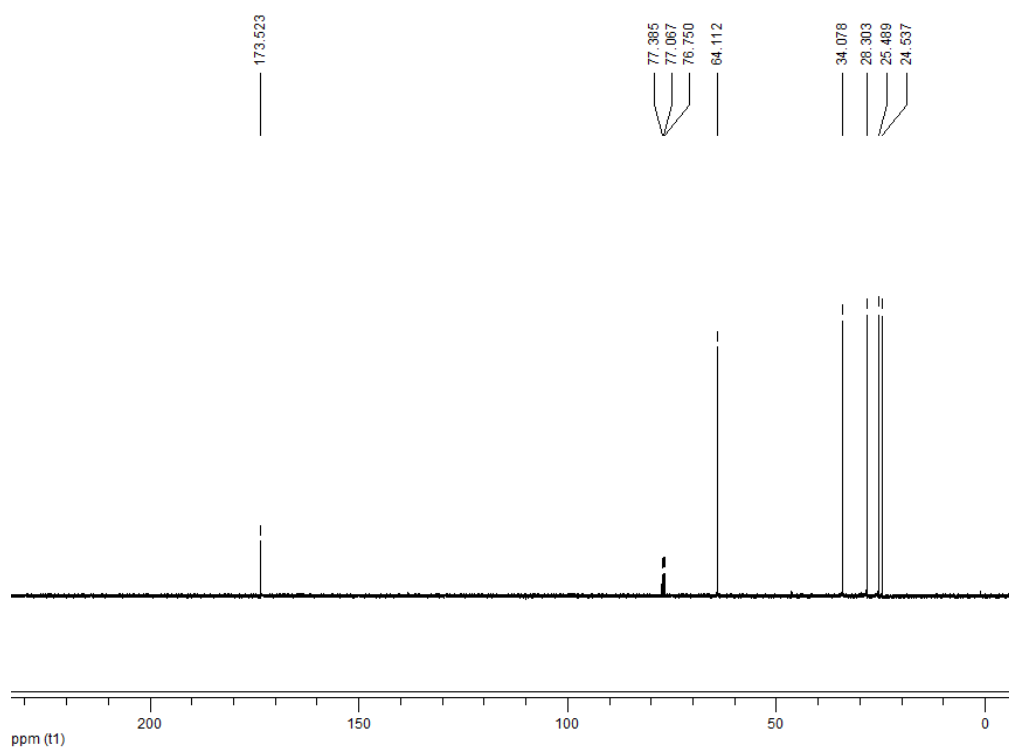
**Figure S9** <sup>13</sup>C NMR spectrum (CDCl<sub>3</sub>, 400 MHz) of the PCL from run 10 (Table 1).



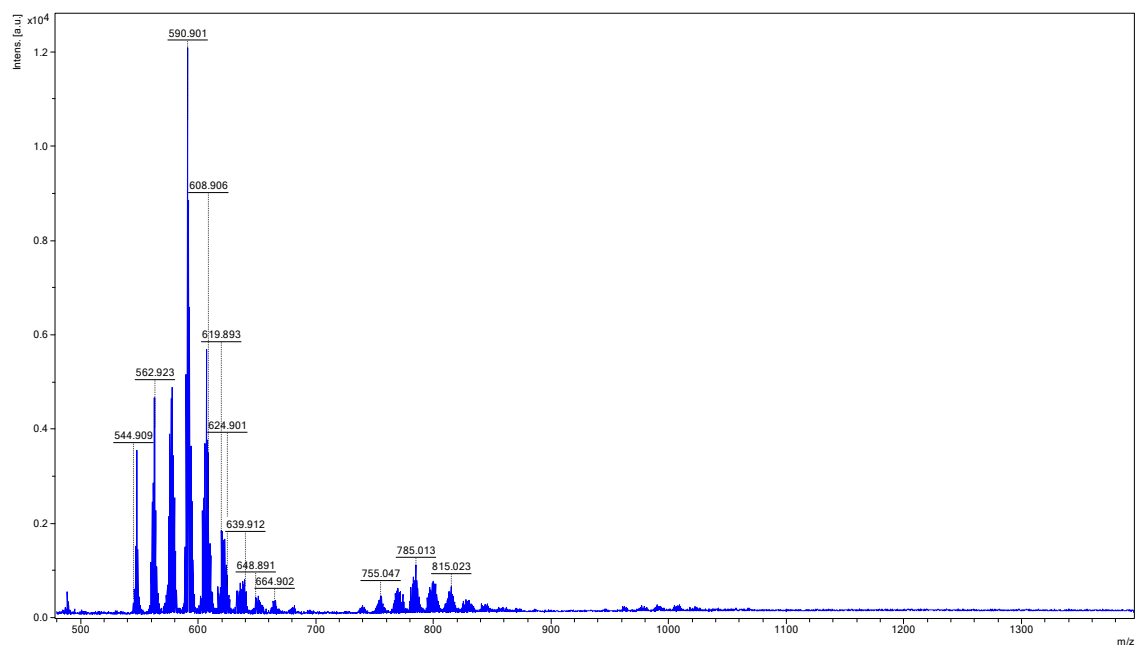
**Figure S10** <sup>13</sup>C NMR spectrum (CDCl<sub>3</sub>, 400 MHz) of the PCL from run 18 (Table 1).



<sup>1</sup>H NMR spectrum (CDCl<sub>3</sub>, 400 MHz) of the PCL from run 21 (Table 1)



<sup>13</sup>C NMR spectrum (CDCl<sub>3</sub>, 400 MHz) of the PCL from run 21 (Table 1)



**Figure S11** MALDI-TOF spectrum of PCL from run 21 (Table 1).