
Supplementary Materials

Contents:

S1. Representative FT-IR spectra for sPIR samples from complexes **1-**, **3-NH-BARF** catalyst system polymerization runs 4-19 in **Table 1.** **2**

S2. Representative C-13 NMR spectra for sPIR samples from complexes **1-**, **3-NH-BARF** catalyst system, polymerization runs 4-19 in **Table 1.** **7**

S3. Representative GPC plots for sPIR samples from complexes **1-**, **3-NH-BARF** catalyst system, polymerization runs 4-19 in **Table 1.** **12**

S4. Representative DSC diagrams for sPIR samples from complexes **1-**, **3-NH-BARF** catalyst system, polymerization runs 5 and 18 in **Table 1.** **20**

S5. Representative C-13 NMR spectra for sPIR samples from complexes **1-**, **2**, **3-MMAO3A** catalyst system, polymerization runs in **Table 2.** **21**

S6. Representative GPC plots for sPIR samples from complexes **1-**, **23-MMAO3A** catalyst system, polymerization runs in **Table 2.** ■ **26**

S1. Representative FT-IR spectra for sPIR samples from complexes **1-**, **3-PDMNH-BARF** catalyst system polymerization runs 4–19 in **Table 1**.

Table 1. Run-4

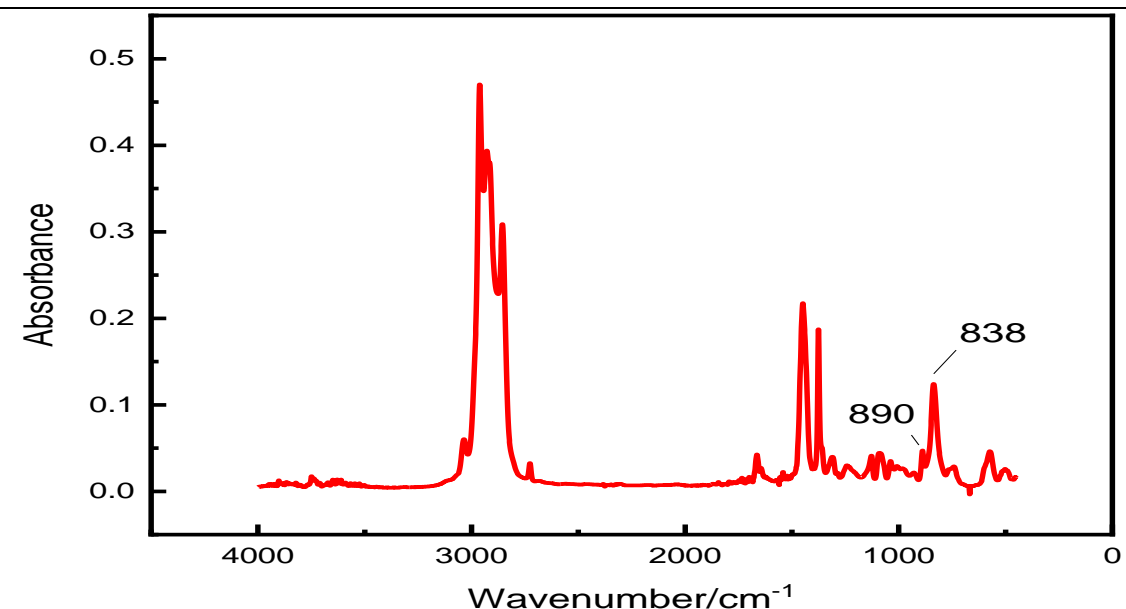


Table 1. Run-5

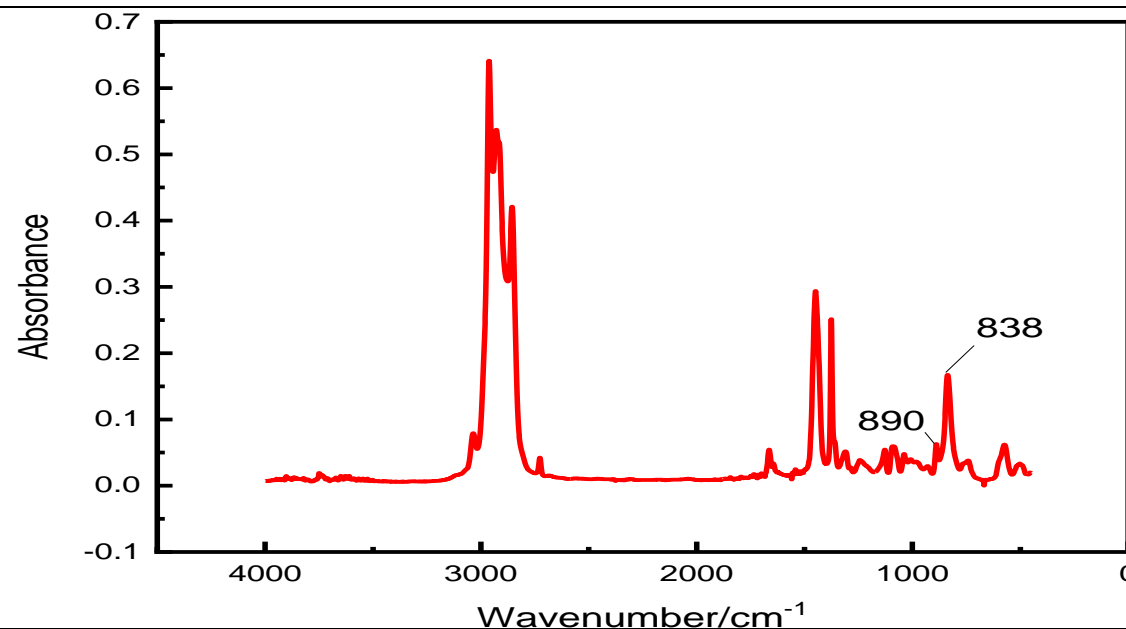


Table 1. Run-6

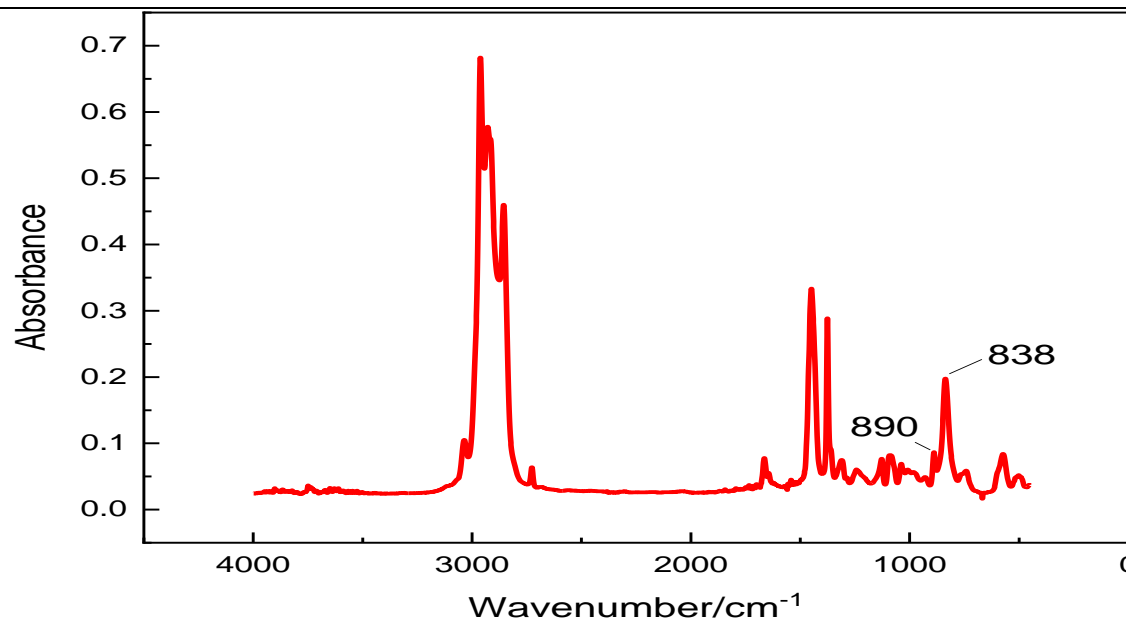


Table 1. Run-7

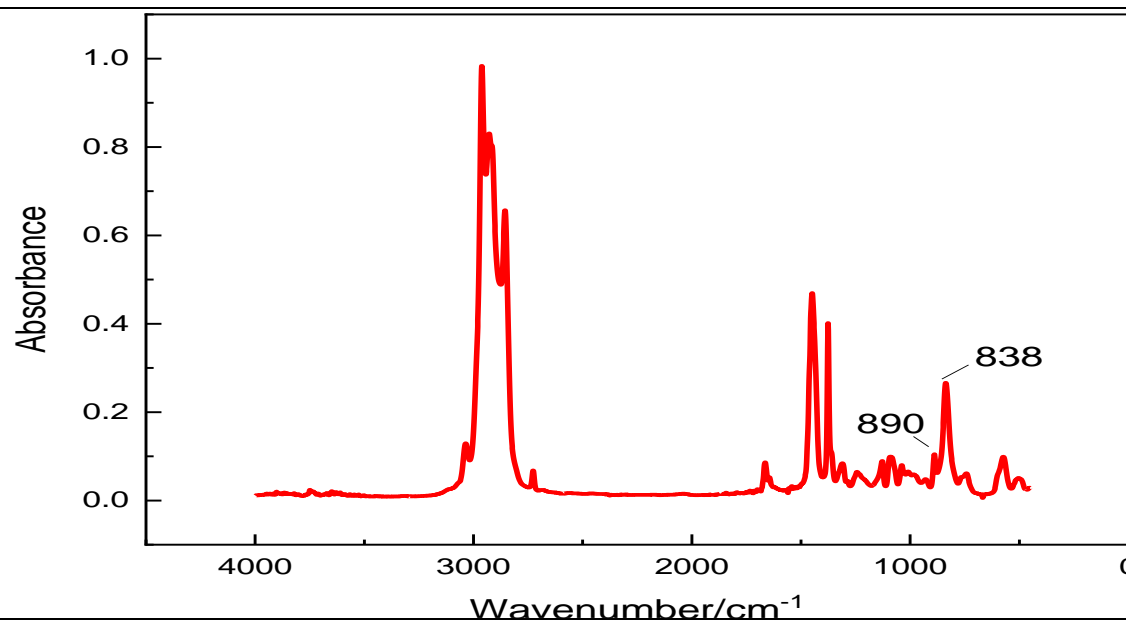


Table 1. Run-8

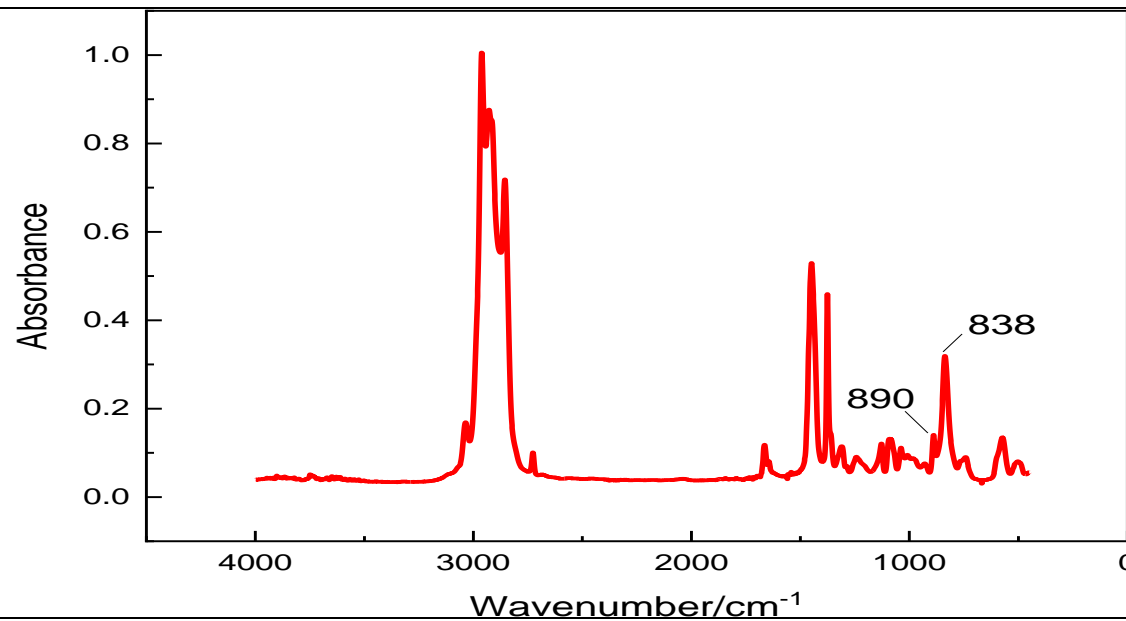


Table 1. Run-9

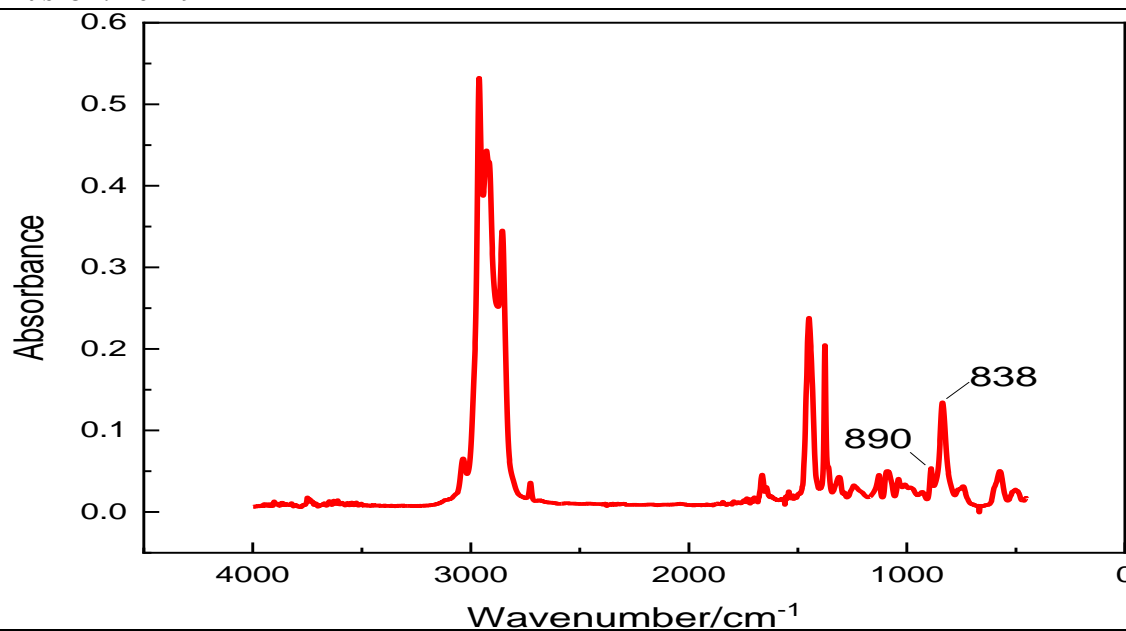


Table 1. Run-10

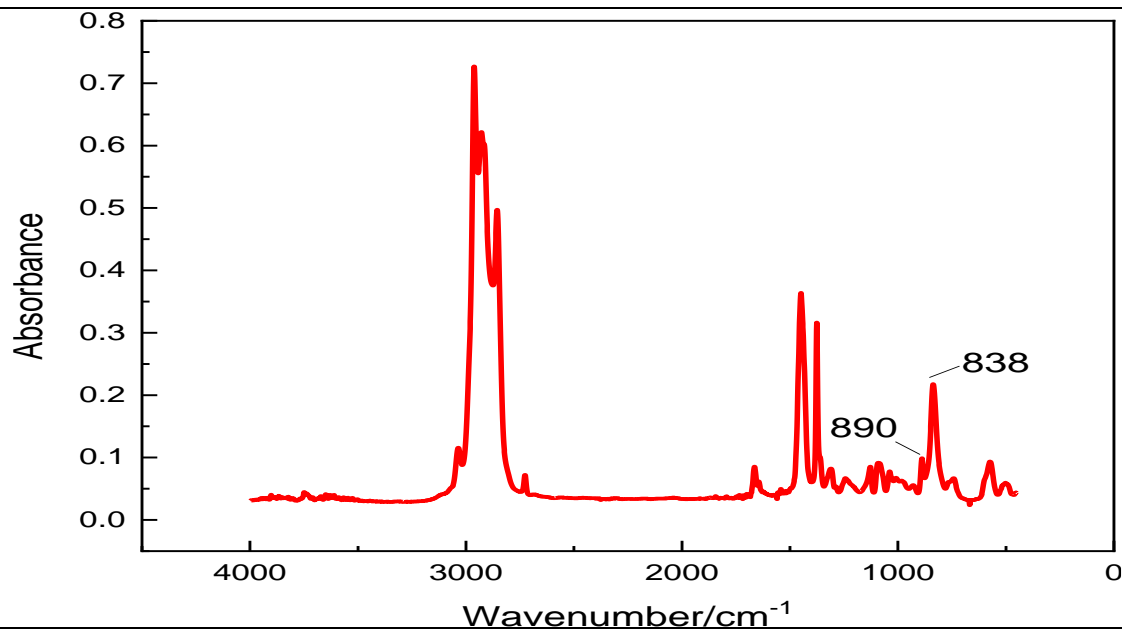


Table 1. Run-11

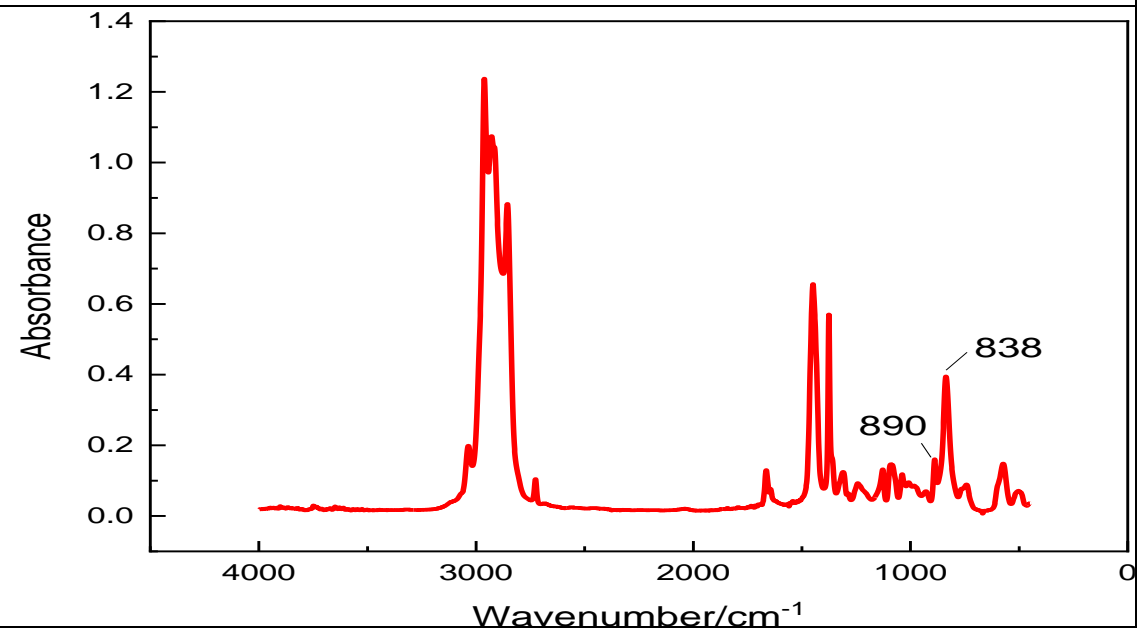


Table 1. Run-12

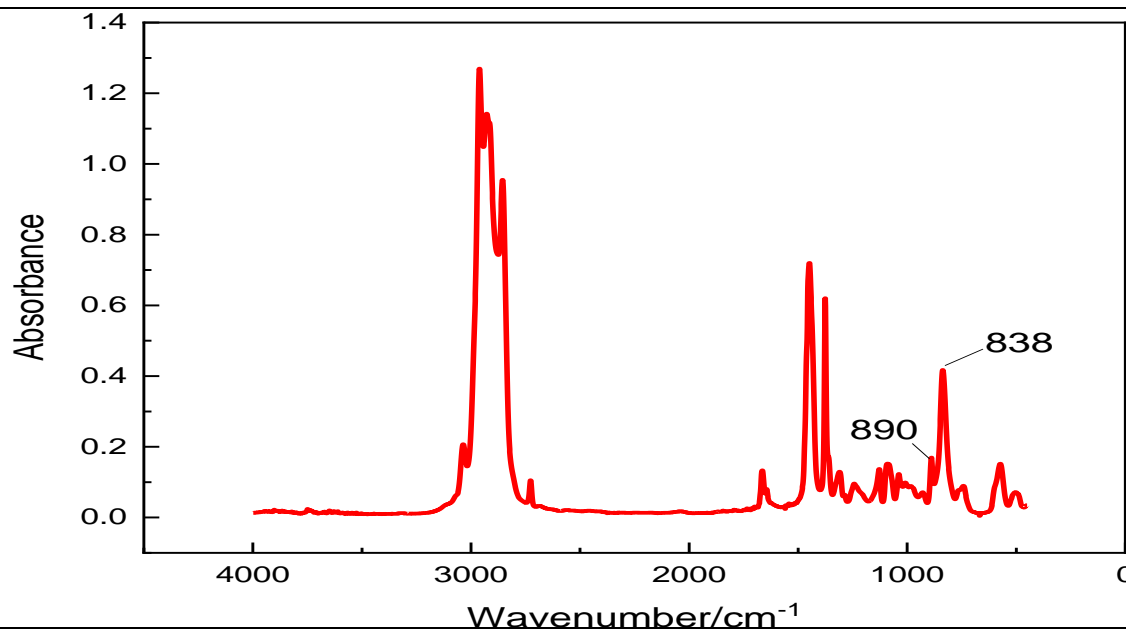
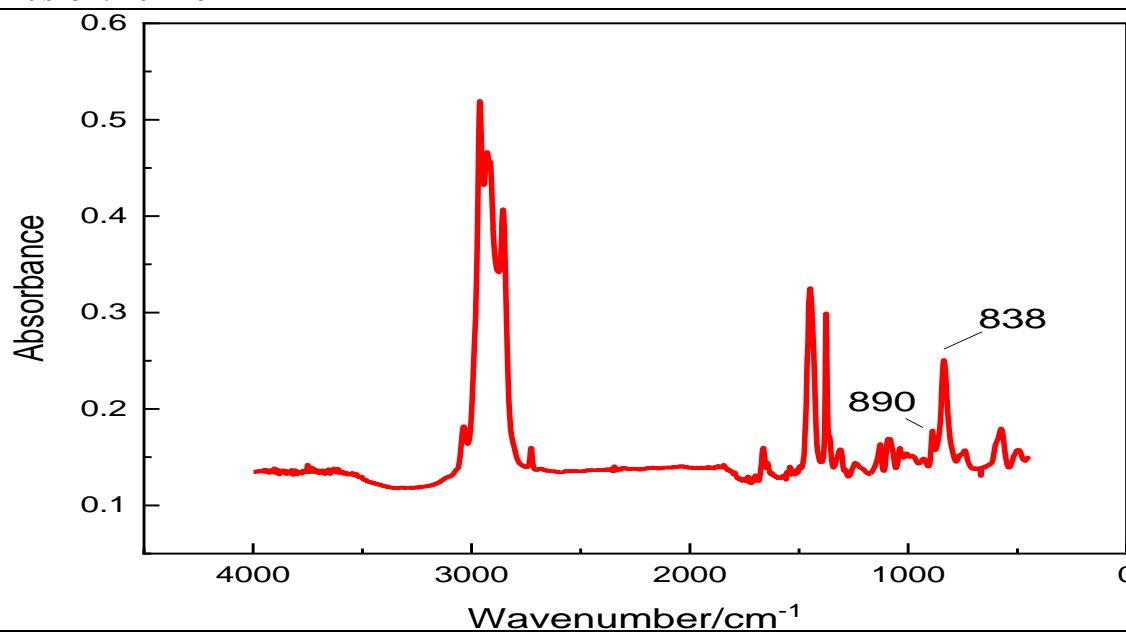


Table 1. Run-18



S2. Representative C-13 NMR spectra for sPIR samples from complexes **1**-, **3**-PDMNH-BARF catalyst system, polymerization runs 4–19 in **Table 1**.

Table 1. Run-4

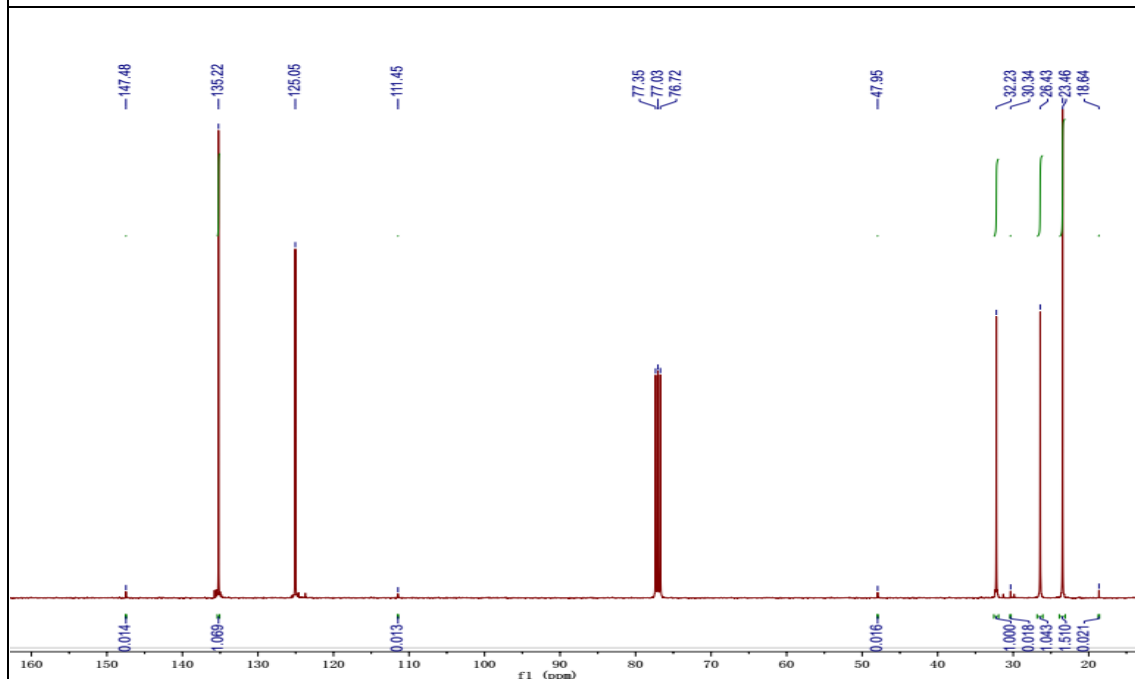


Table 1. Run-5

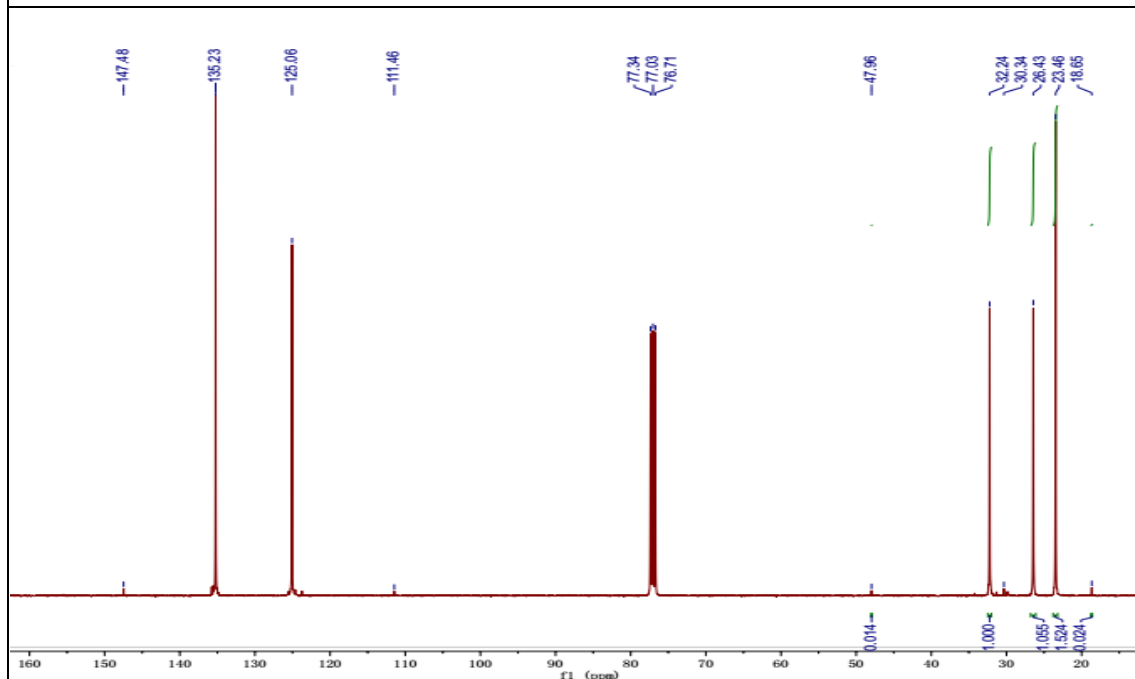


Table 1 Run-6

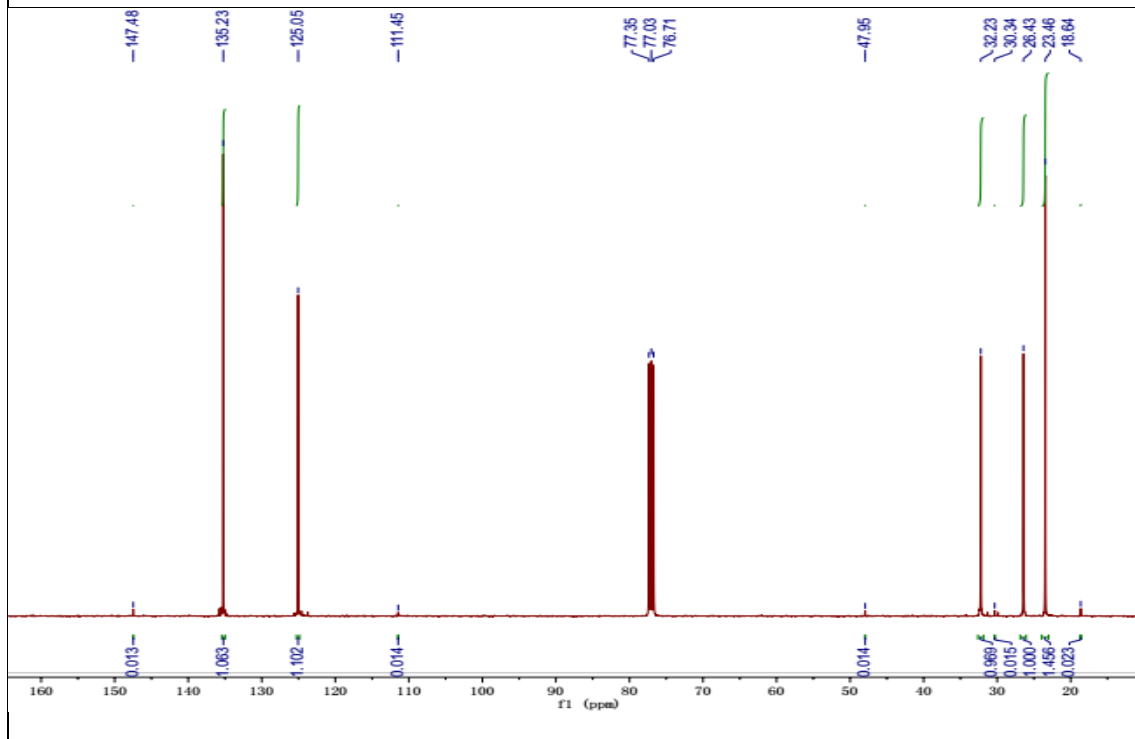


Table 1 Run-7

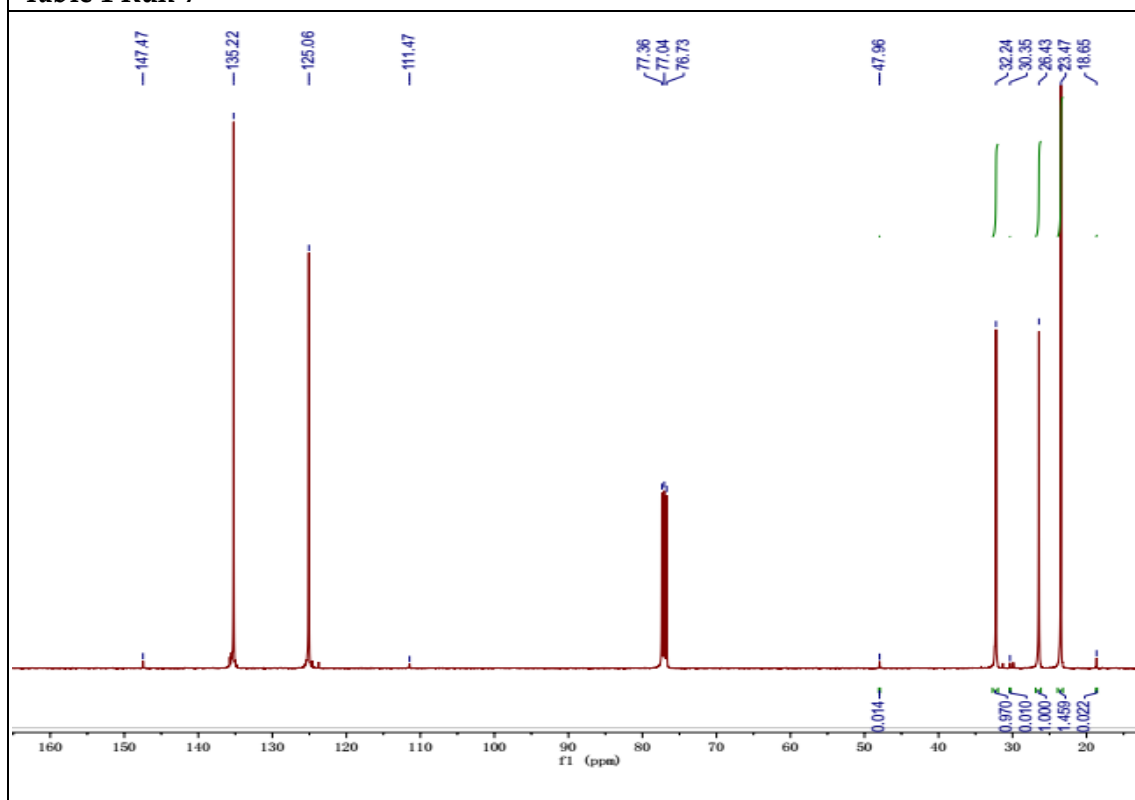


Table 1 Run-8

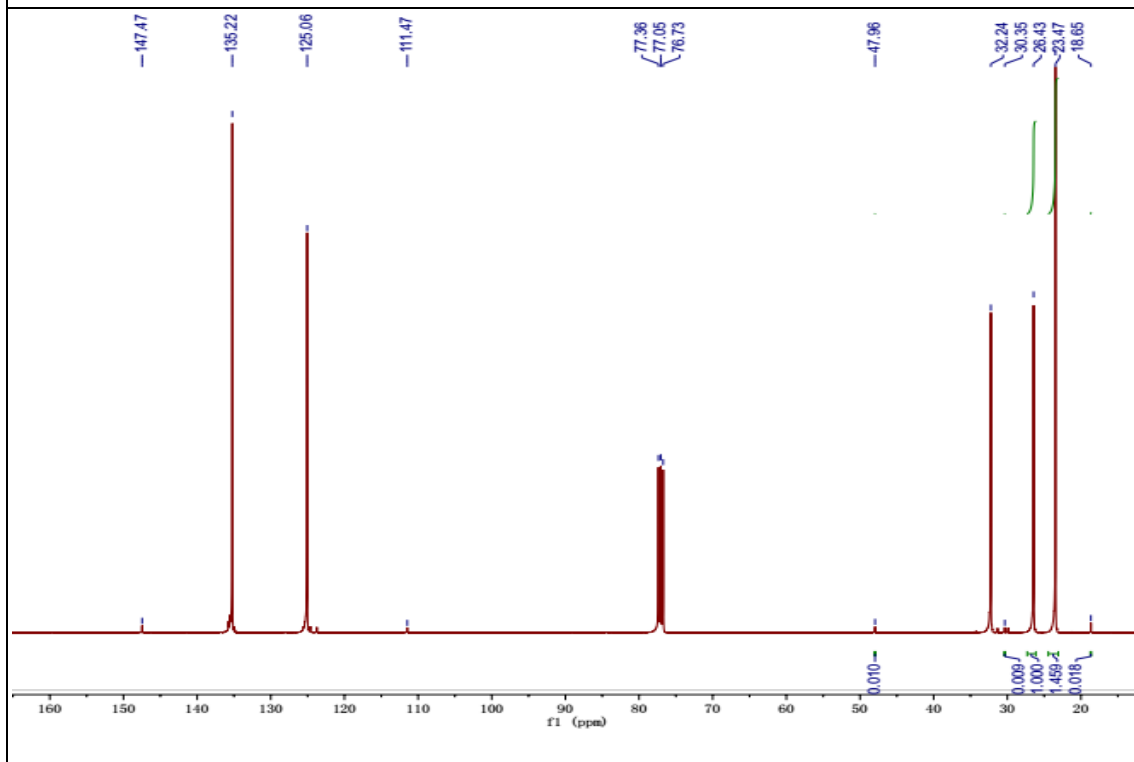


Table 1 Run-9

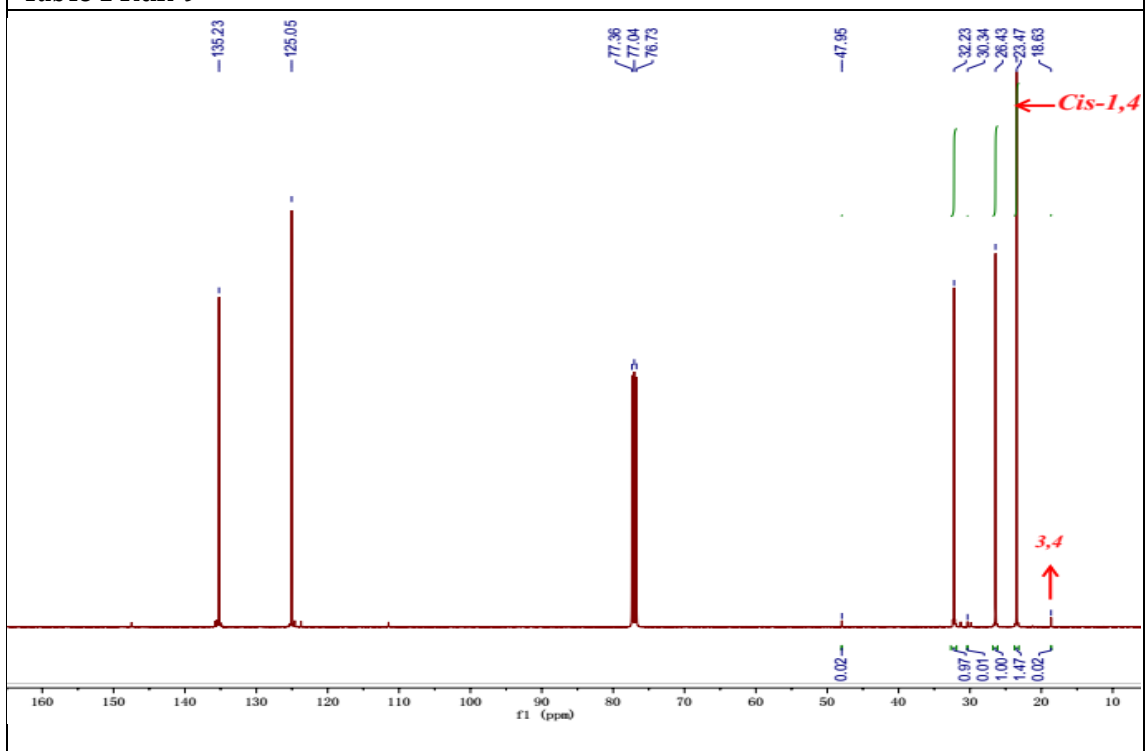


Table 1 Run-10

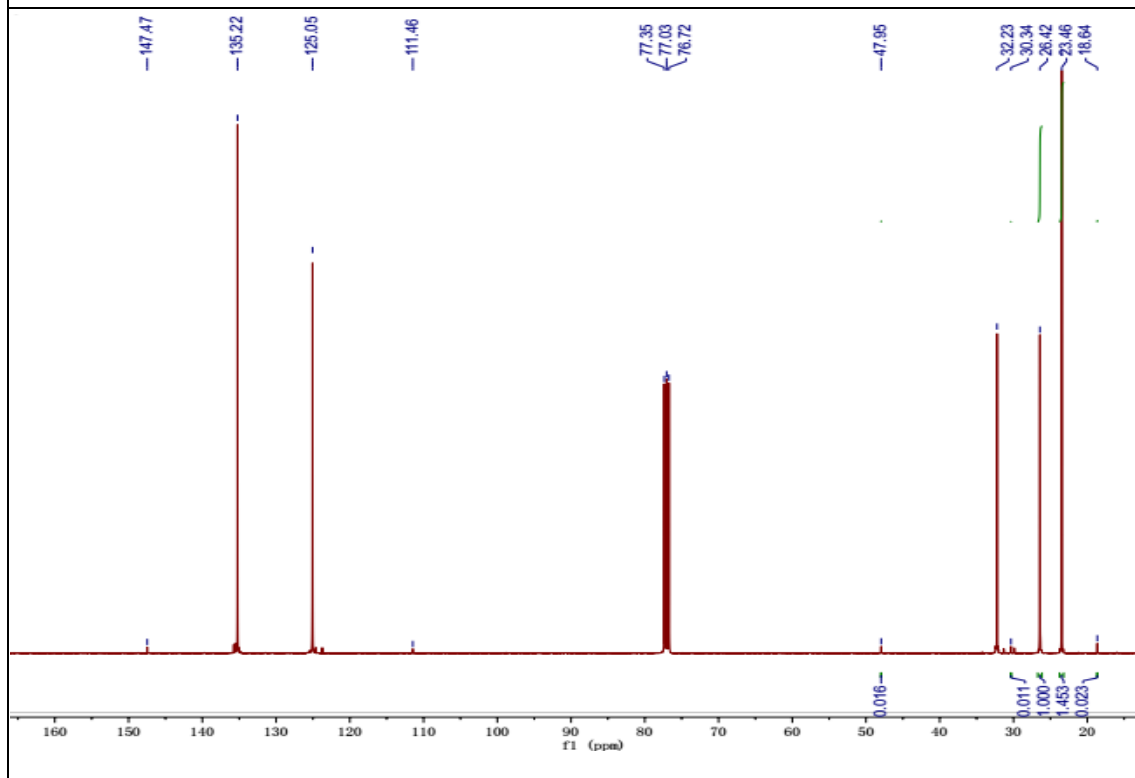


Table 1 Run-11

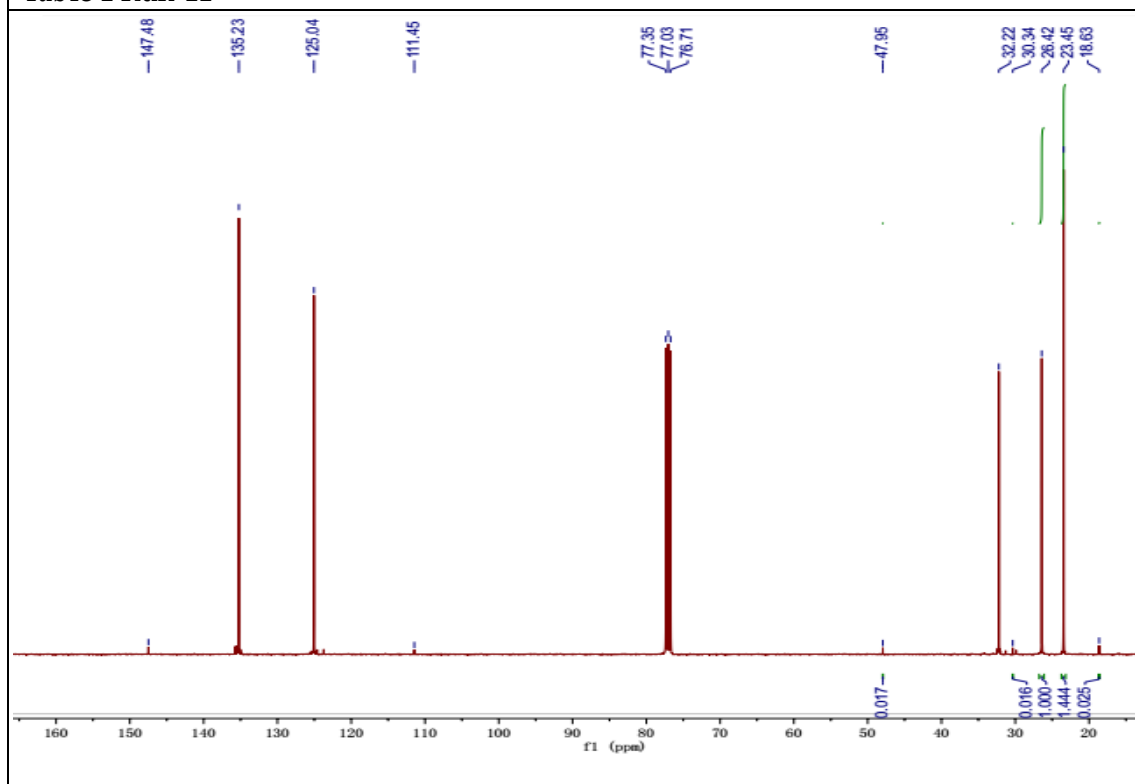


Table 1 Run-12

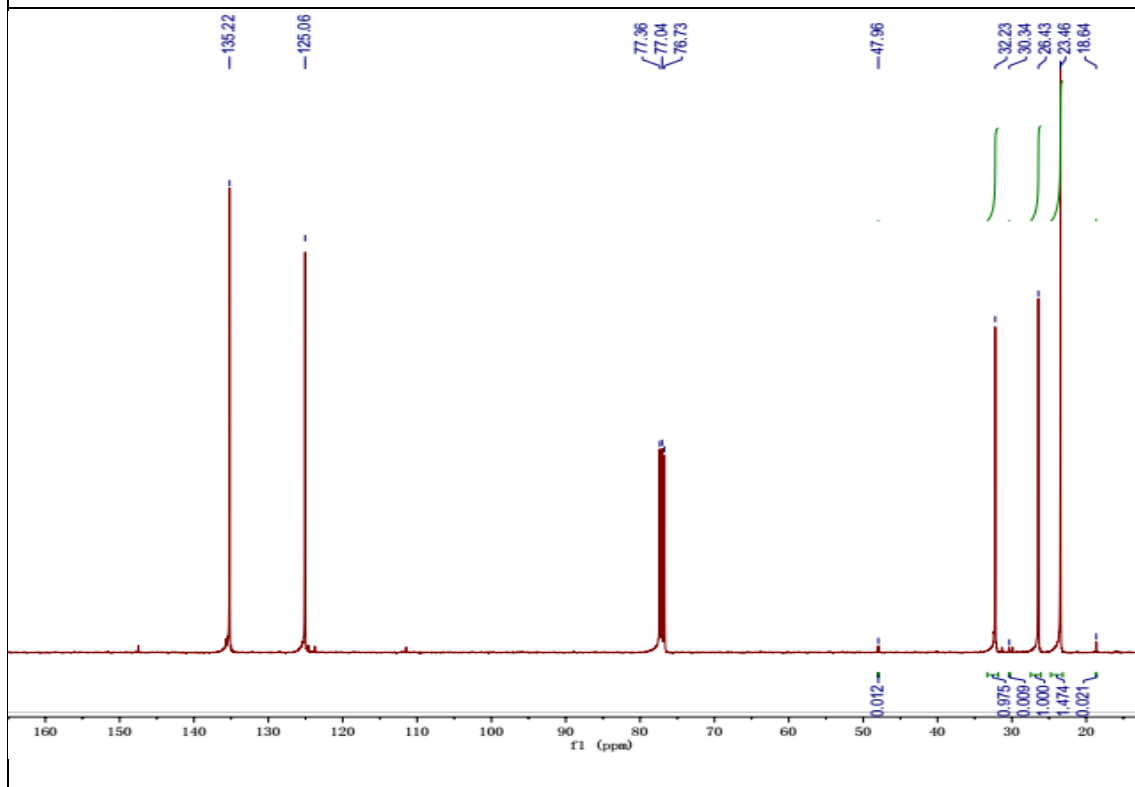
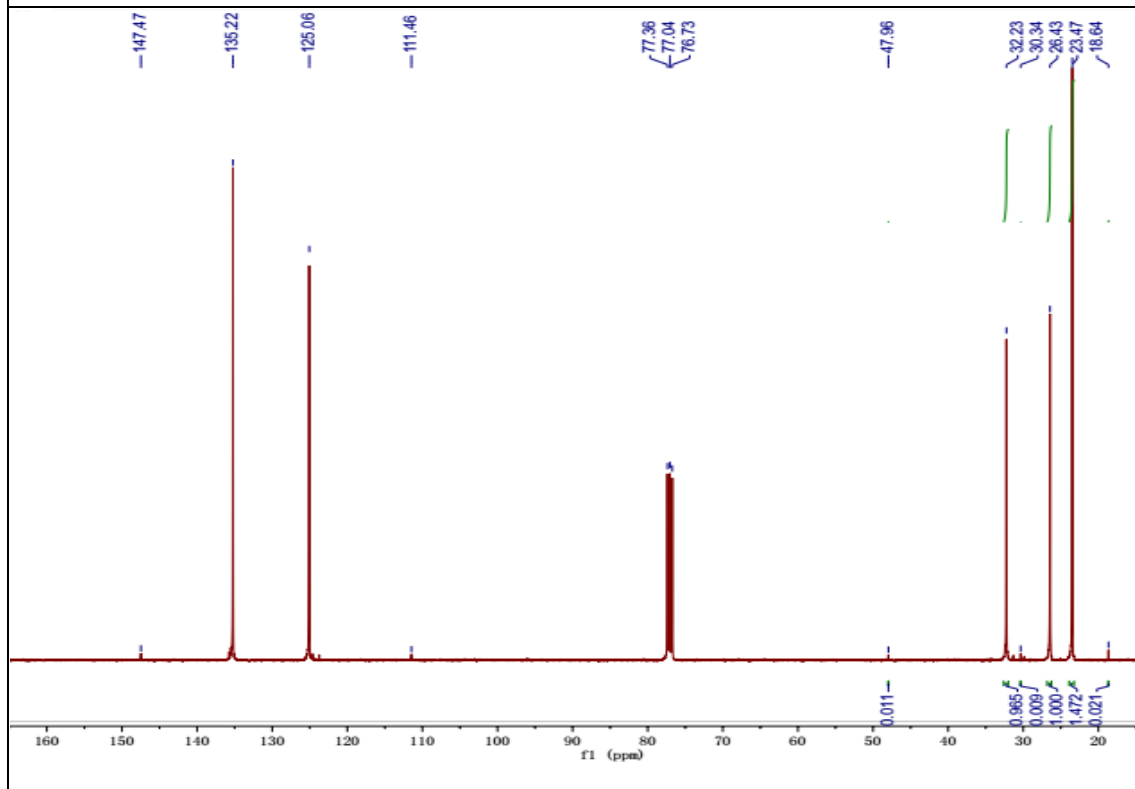


Table 1 Run-18



S3. Representative GPC diagrams for sPIR samples from complexes **1**-, **3**-PDMNH-BARF catalyst system, polymerization runs 4–19 in **Table 1**.

Table 1 Run-1

Distribution Plot

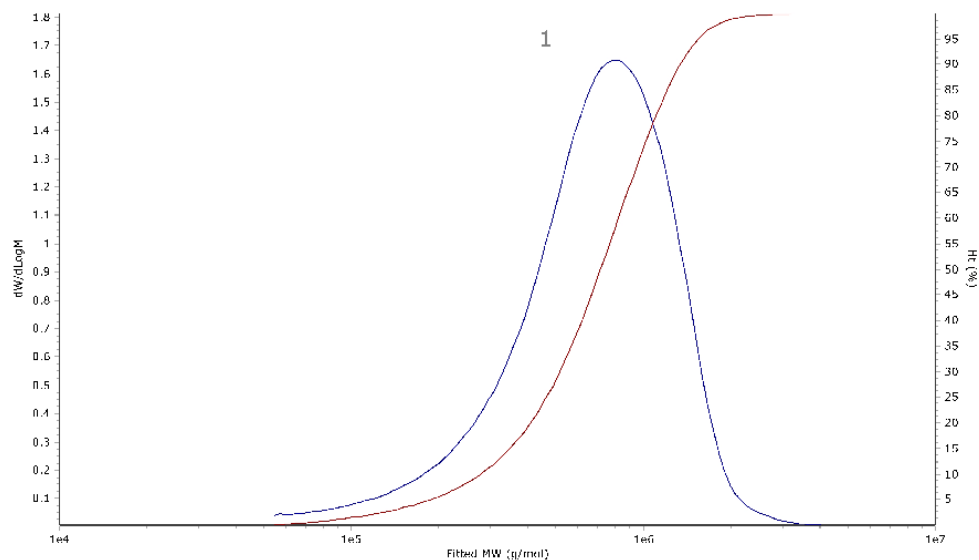


Table 1 Run-4

Distribution Plot

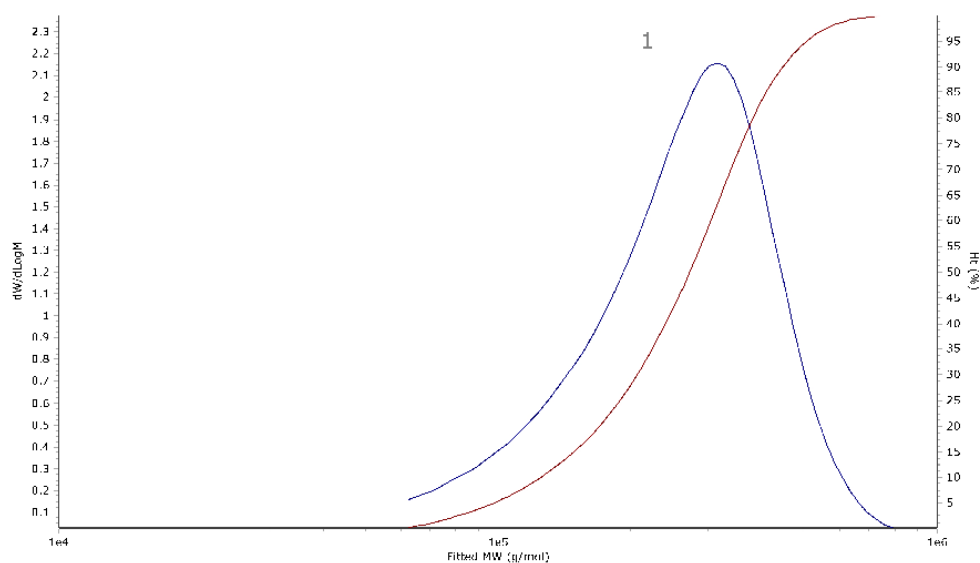


Table 1 Run-5

Distribution Plot

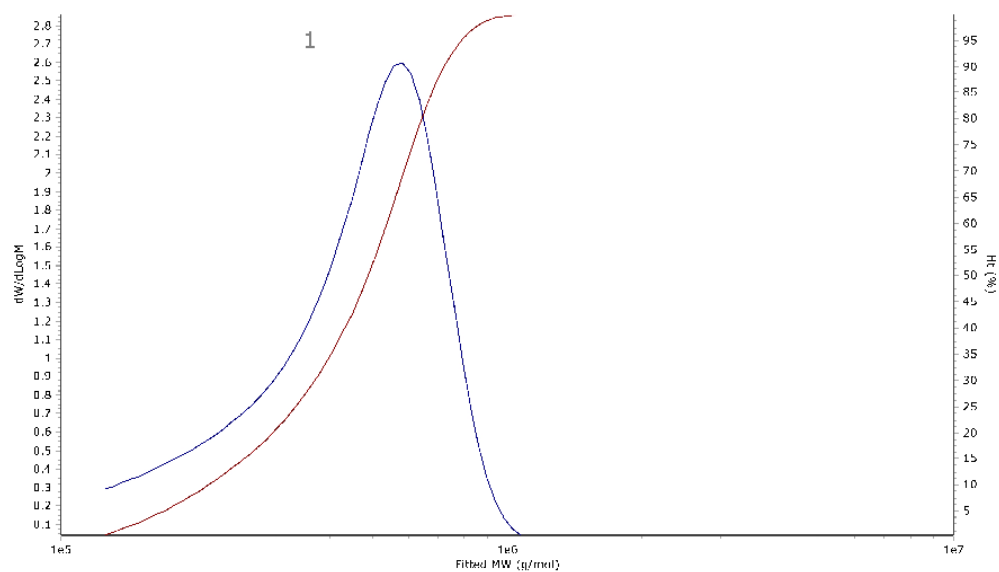


Table 1 Run-6

Distribution Plot

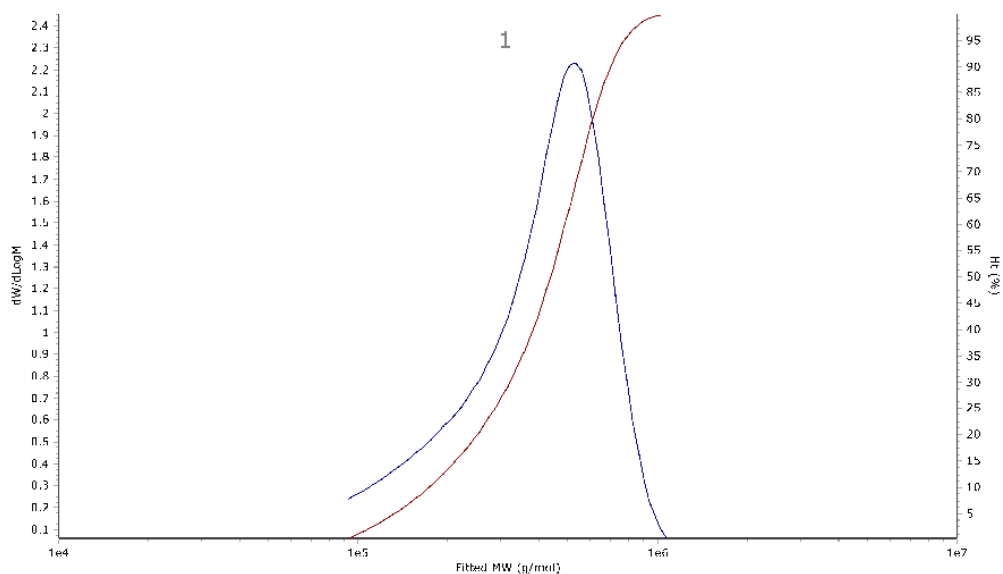


Table 1 Run-7

Distribution Plot

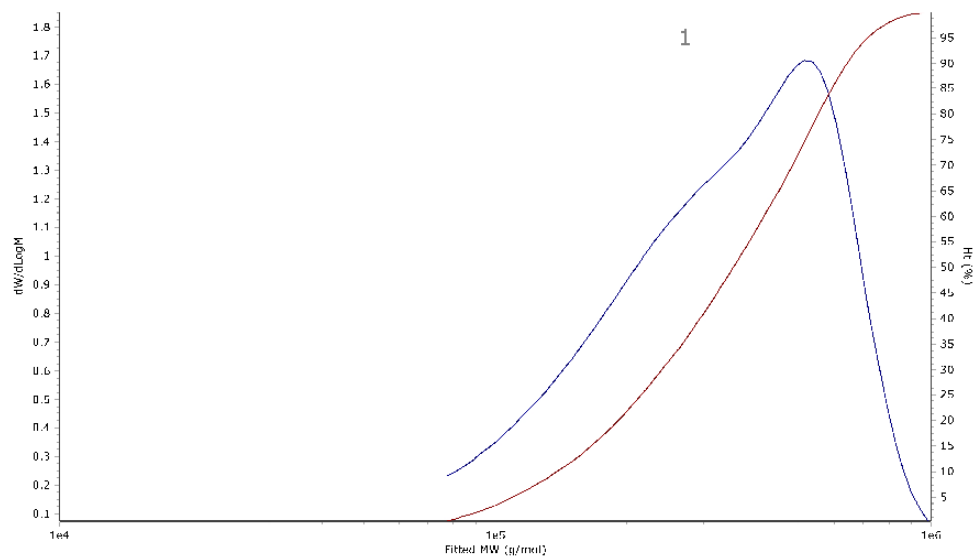


Table 1 Run-8

Distribution Plot

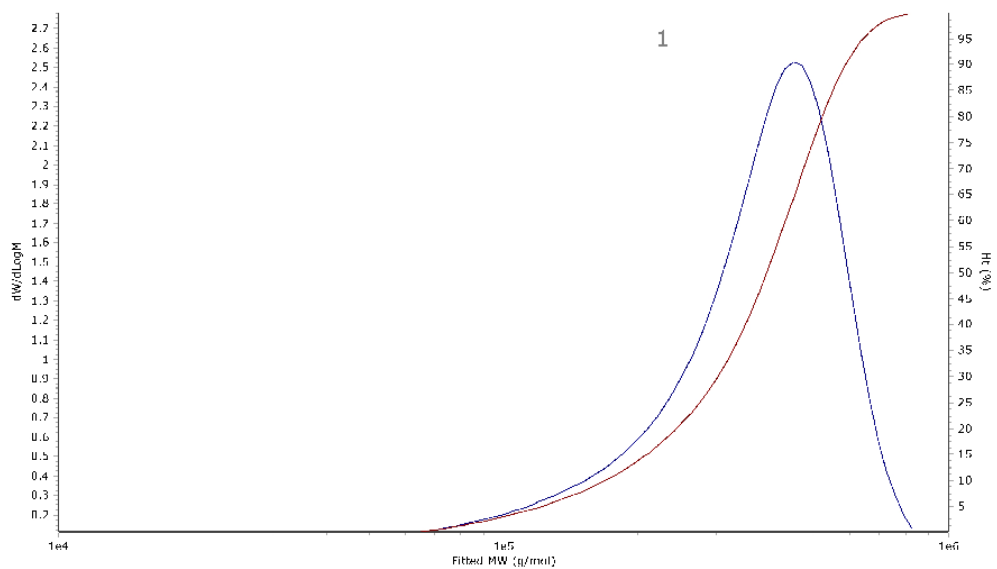


Table 1 Run-9

Distribution Plot

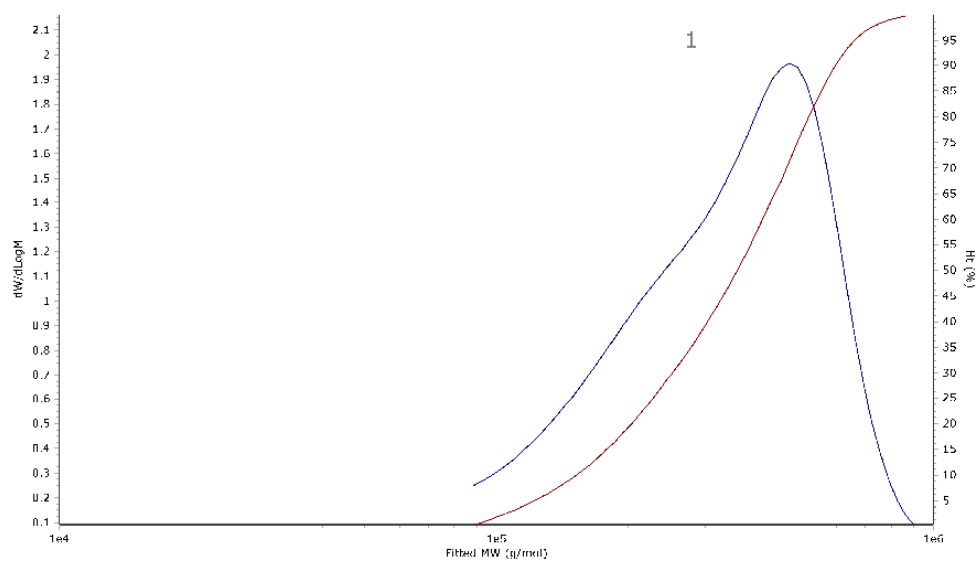


Table 1 Run-10

Distribution Plot

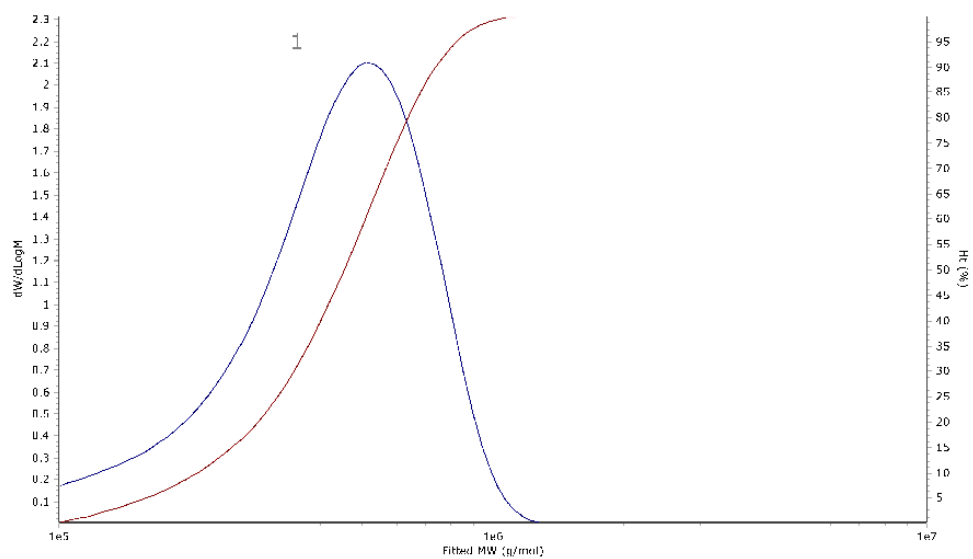


Table 1 Run-11

Distribution Plot

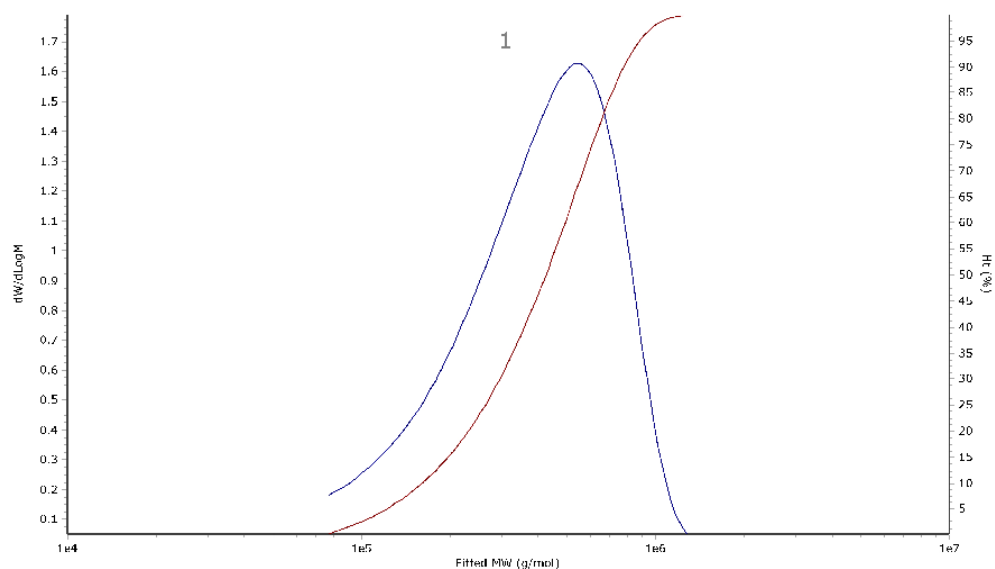


Table 1 Run-12

Distribution Plot

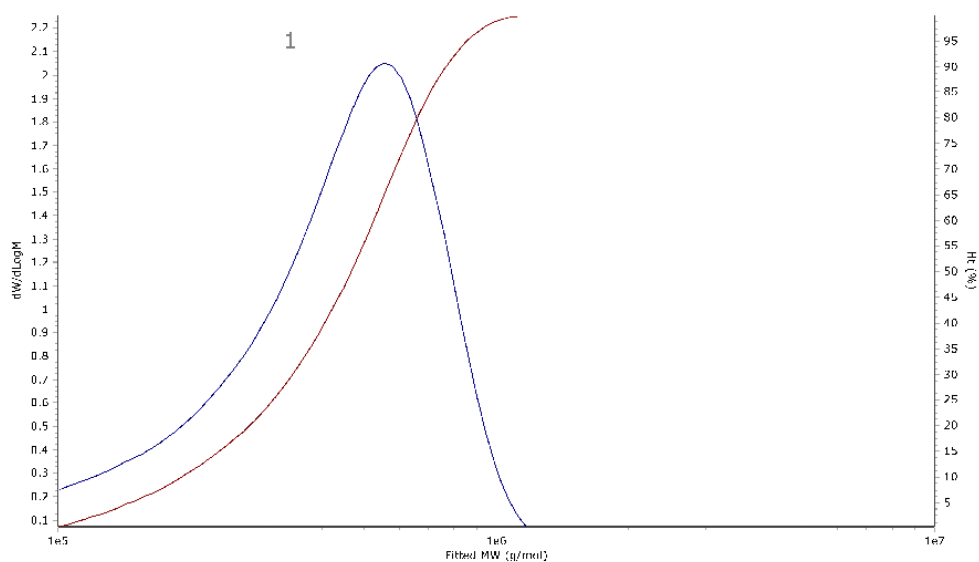


Table 1 Run-13

Distribution Plot

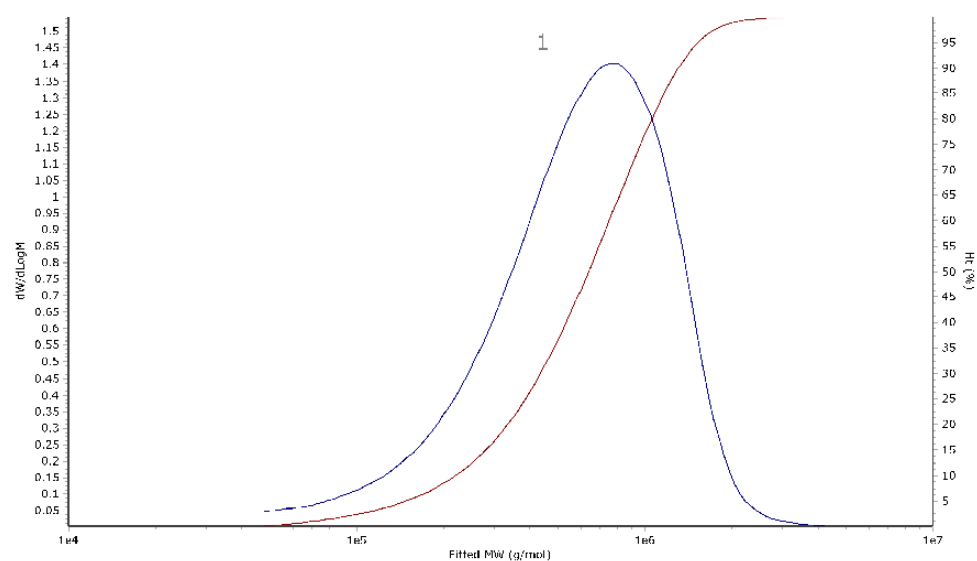


Table 1 Run-14

Distribution Plot

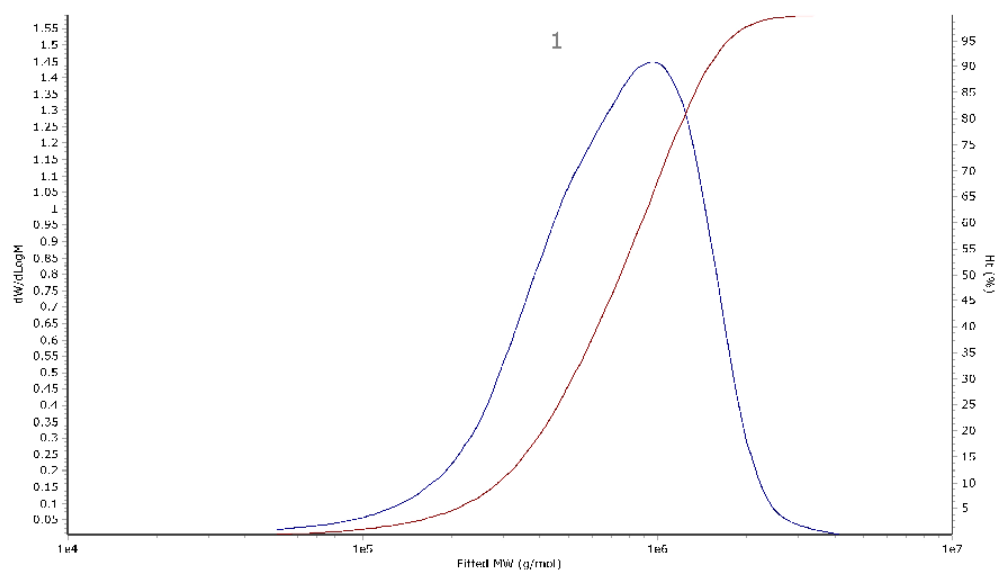


Table 1 Run-15

Distribution Plot

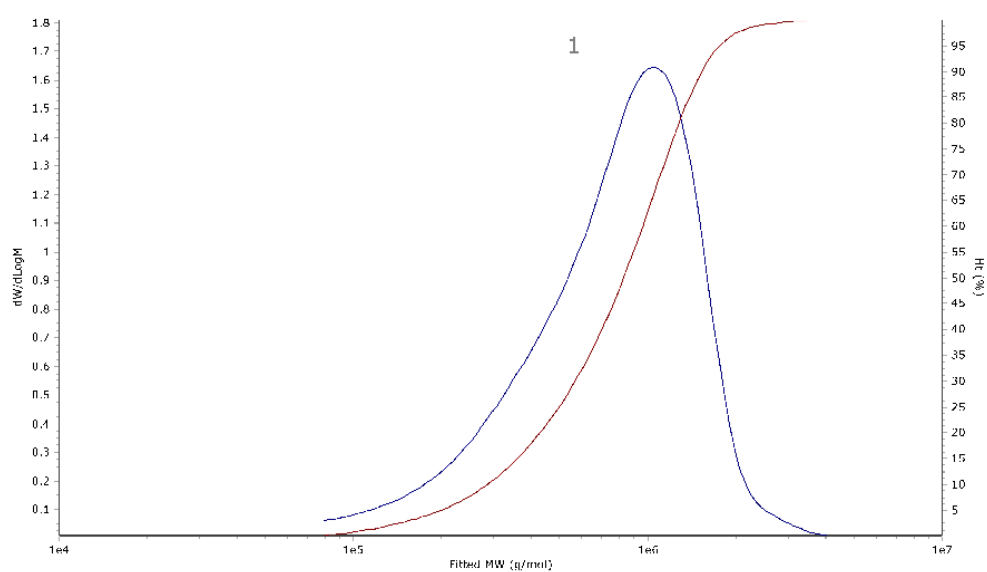


Table 1 Run-16

Distribution Plot

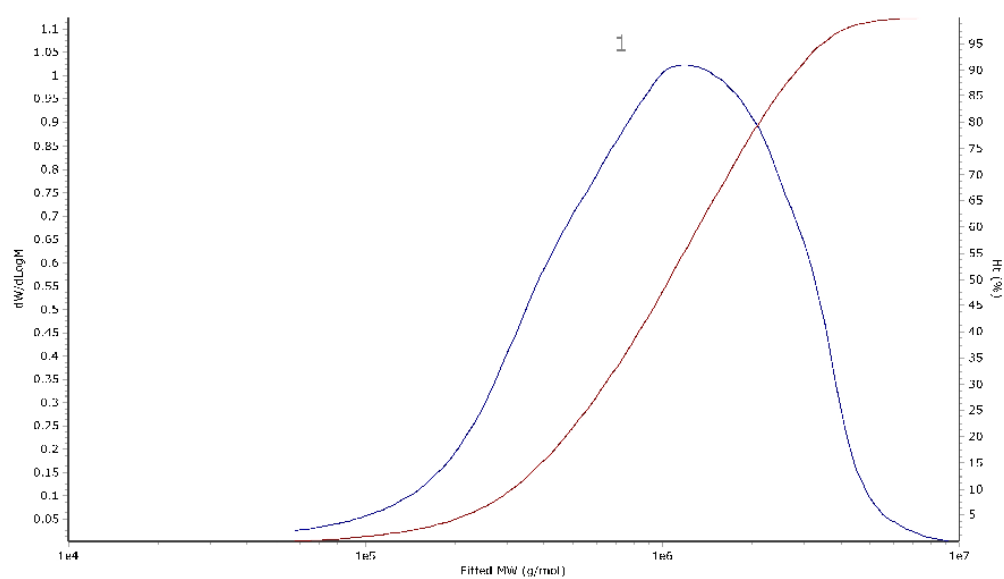


Table 1 Run-17

Distribution Plot

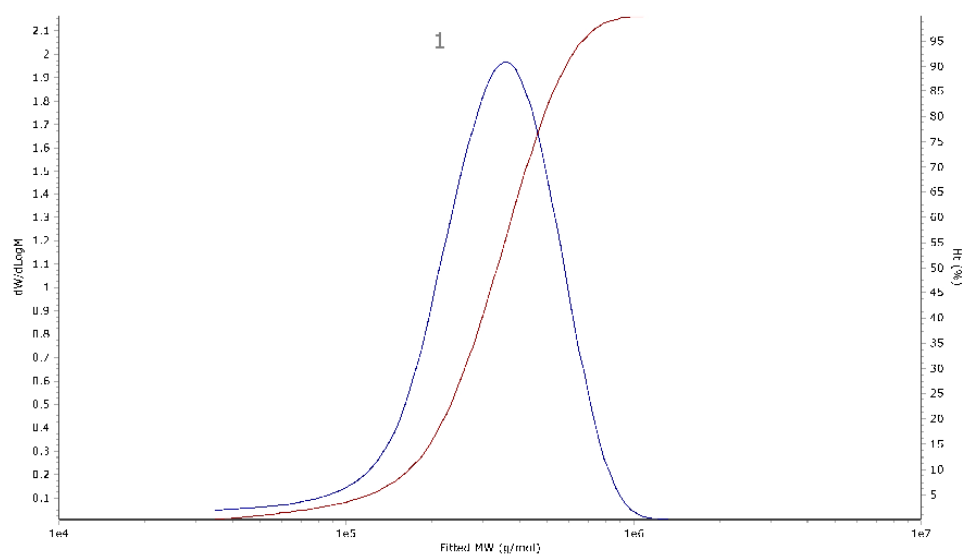


Table 1 Run-18

Distribution Plot

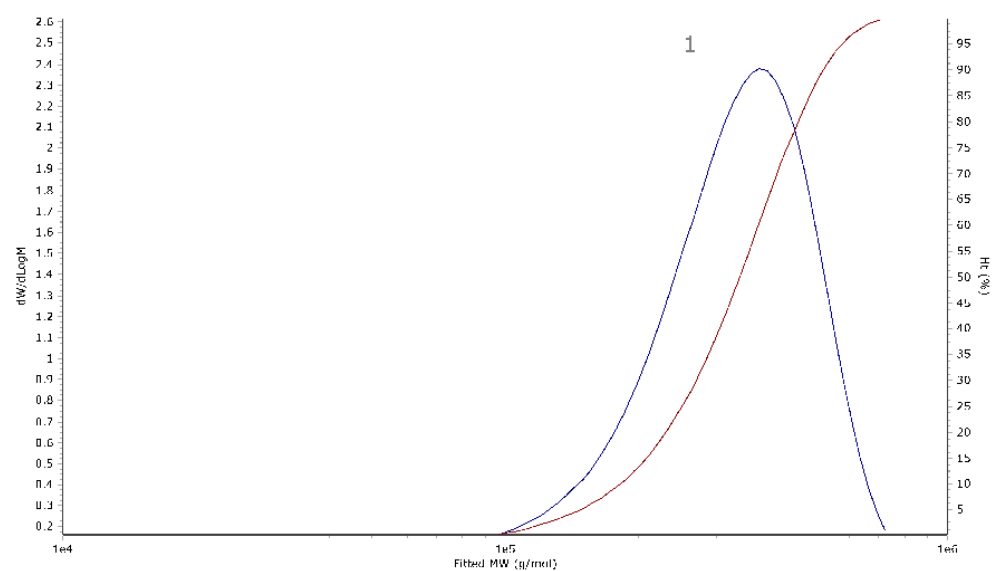
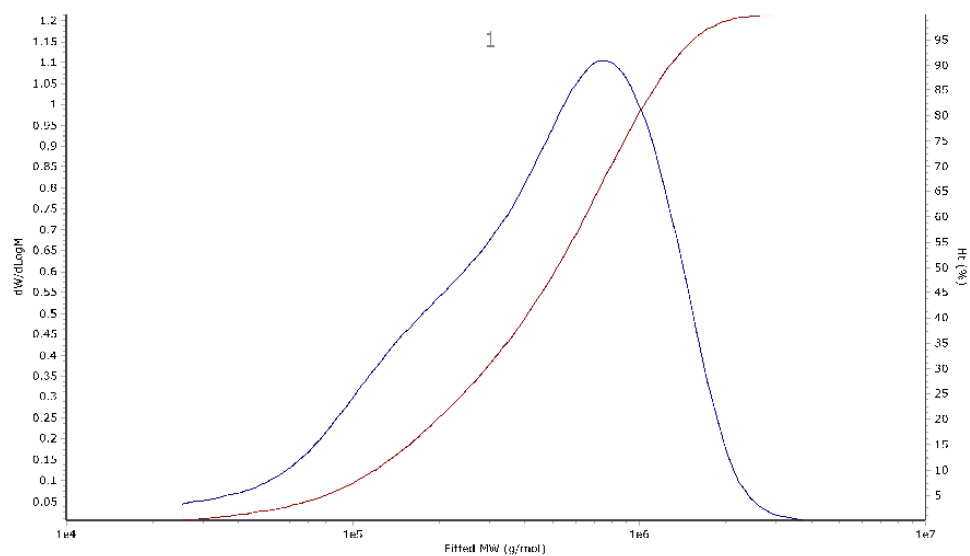


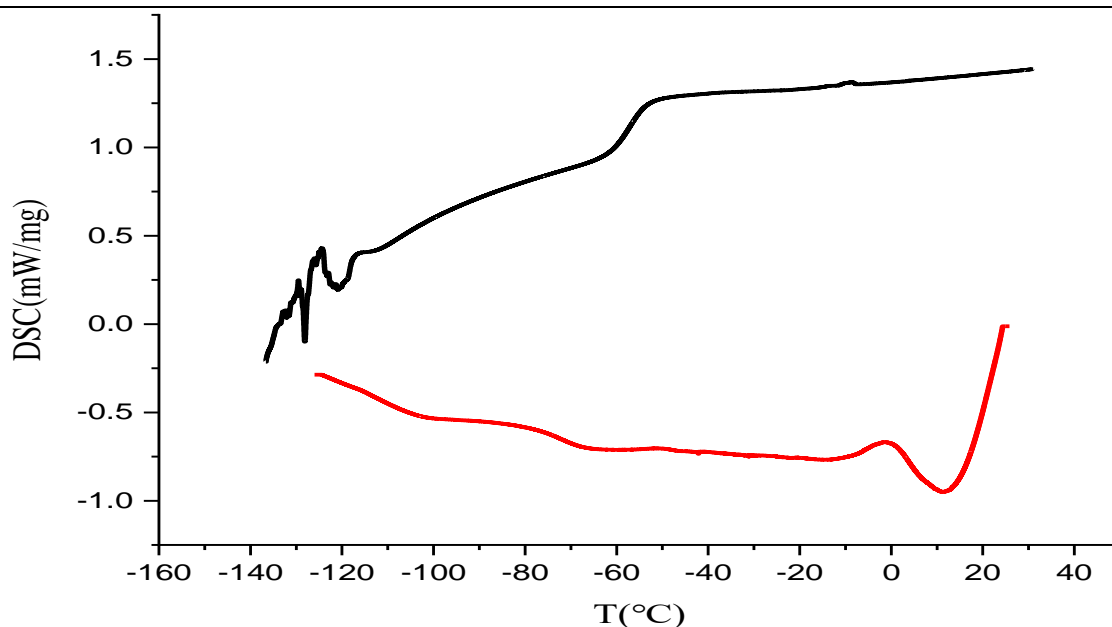
Table 1 Run-19

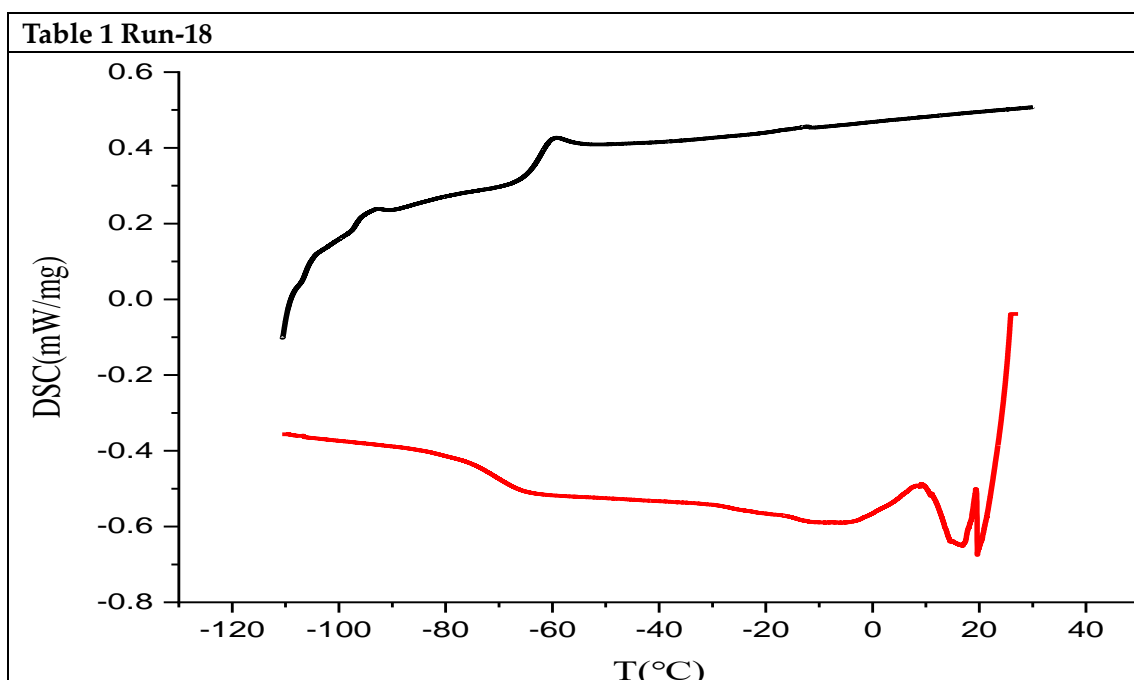
Distribution Plot



S4. Representative DSC diagrams for sPIR samples from complexes **1**-, **3**-PDMNH-BARF catalyst system, polymerization runs 5 and 18 in **Table 1**.

Table 1 Run-5





S5. Representative C-13 NMR spectra for sPIR samples from complexes **1**-, **2**, **3**-MMAO3A catalyst system, polymerization runs in **Table 2**.

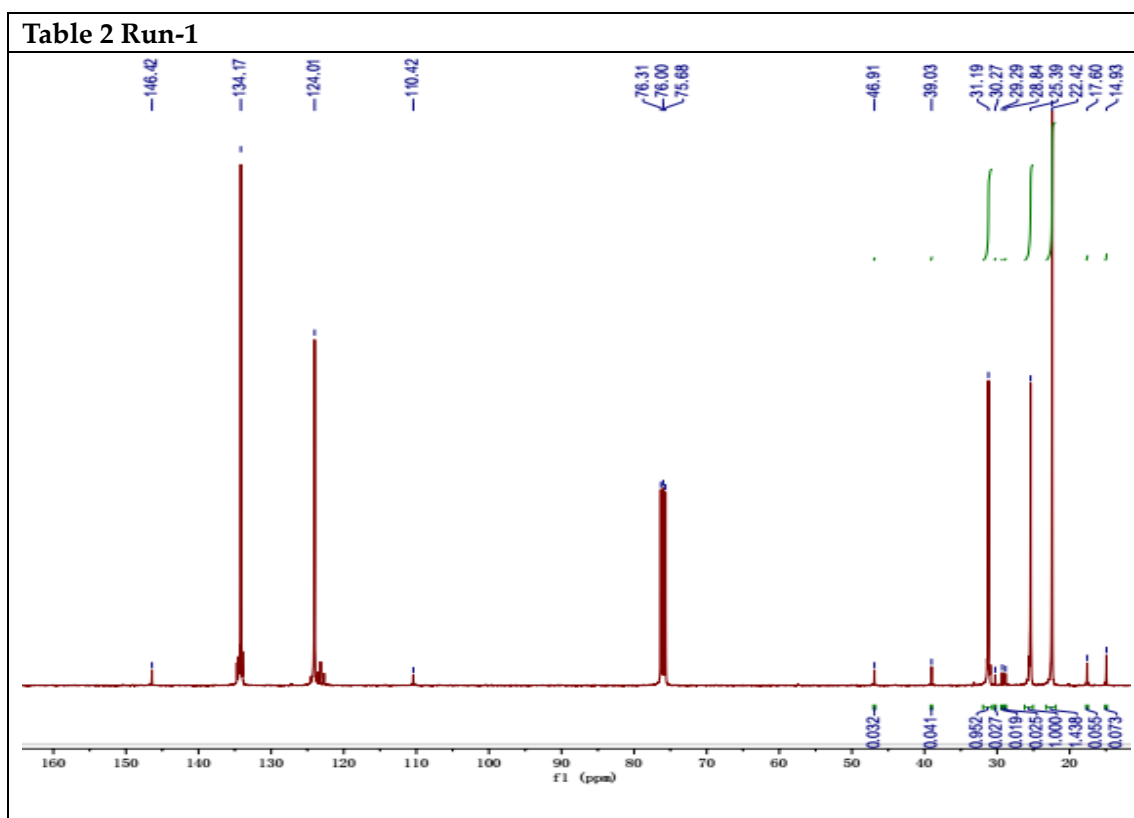


Table 2 Run-2

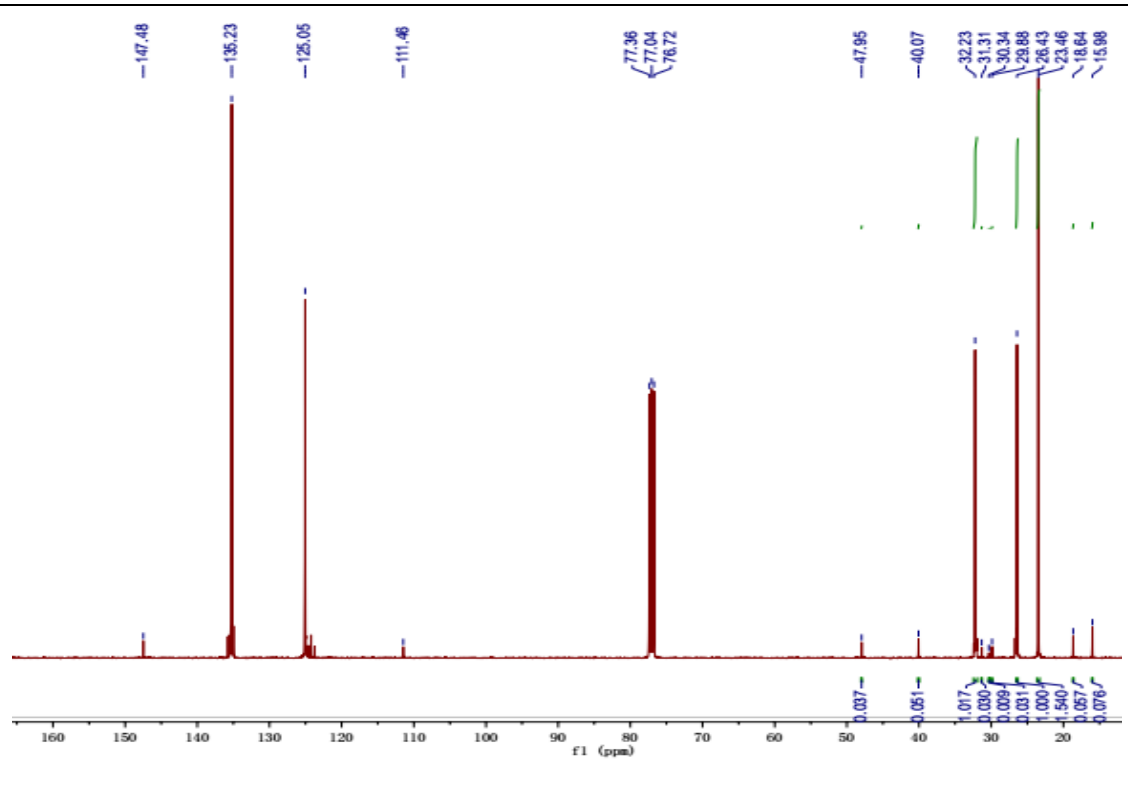


Table 2 Run-3

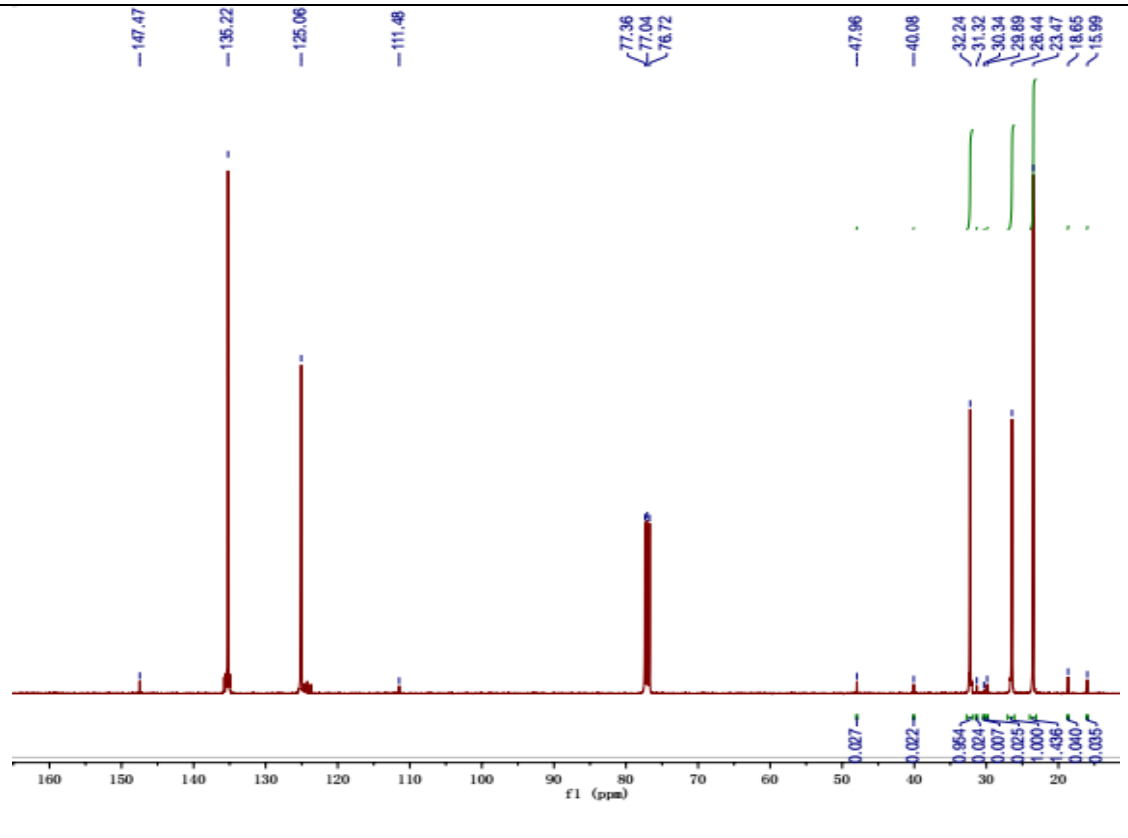


Table 2 Run-4

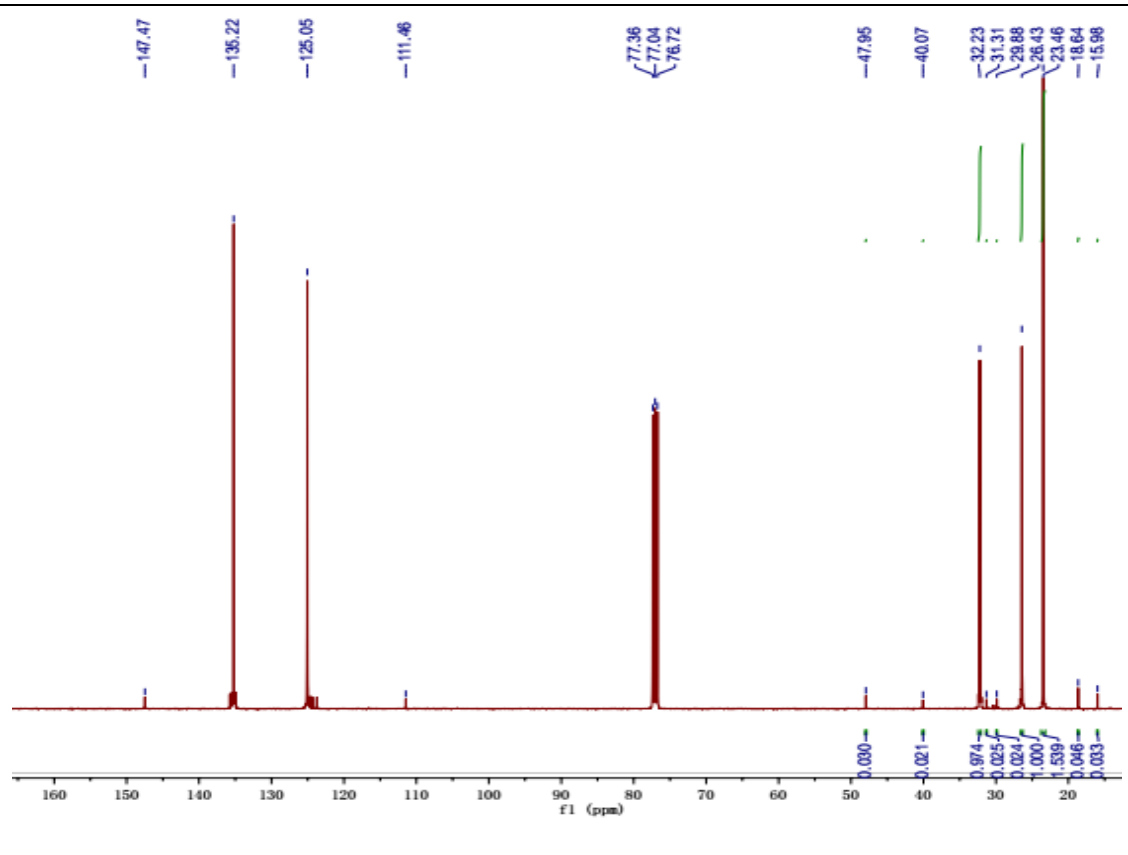


Table 2 Run-5

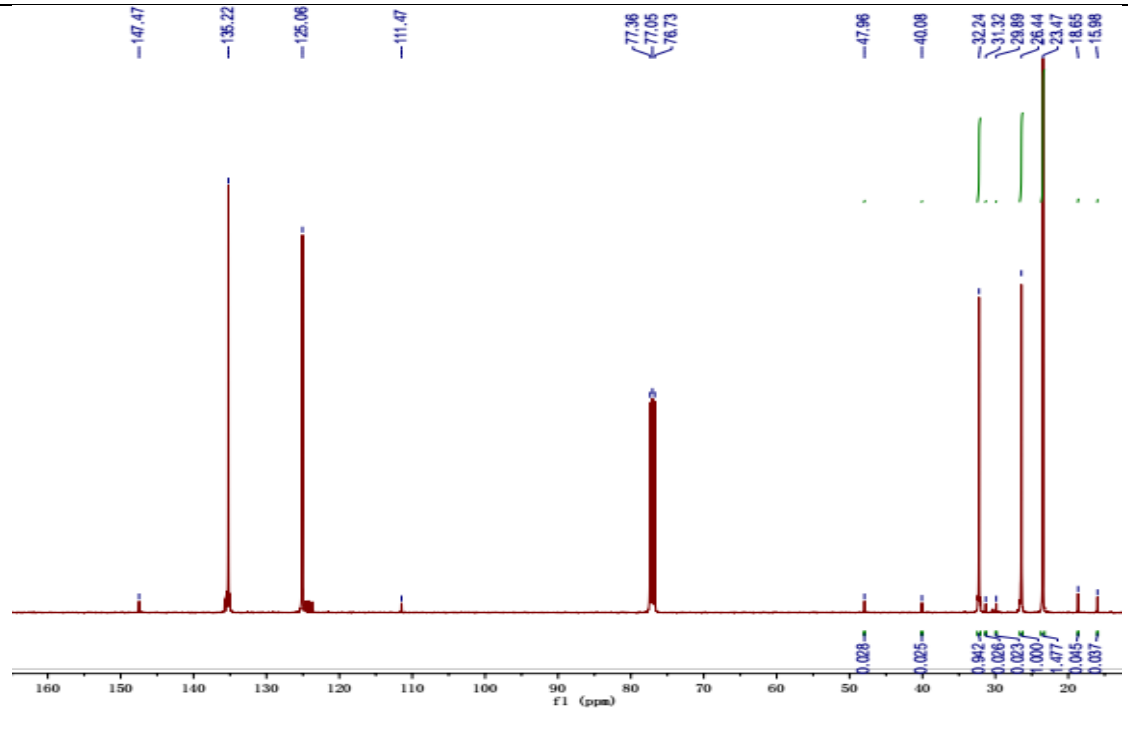


Table 2 Run-6

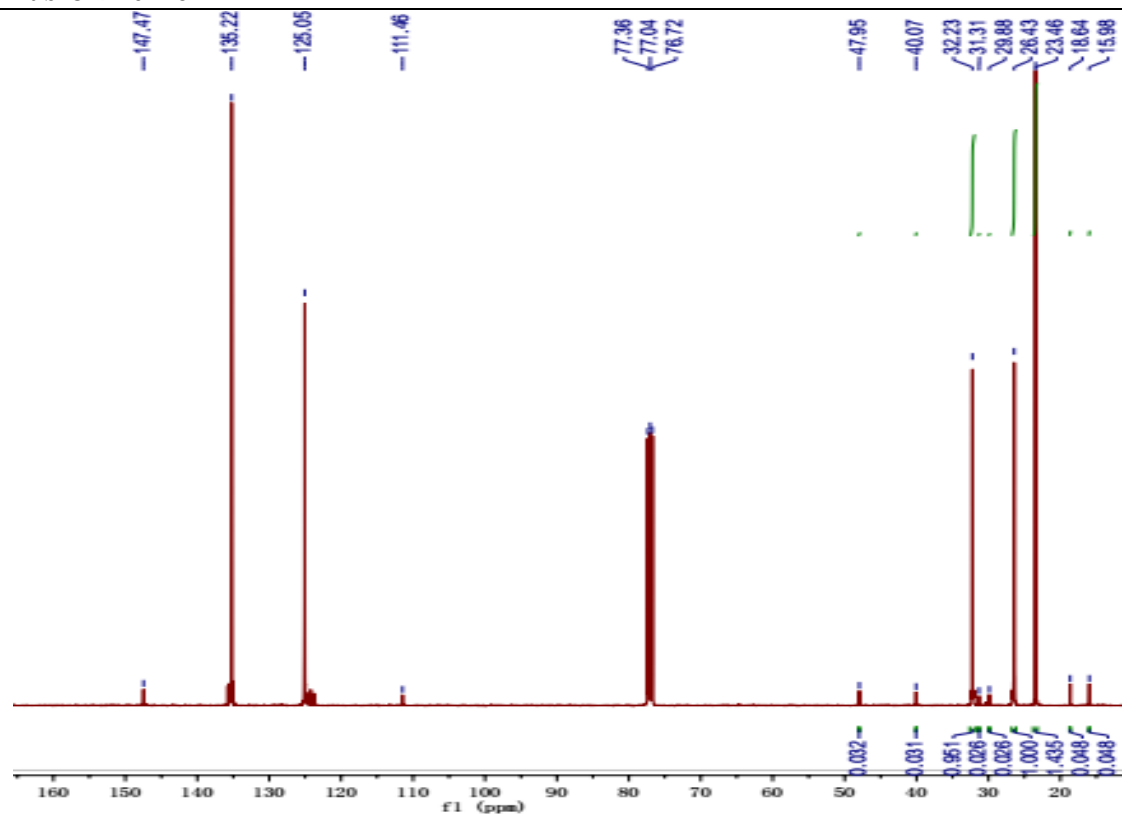


Table 2 Run-7

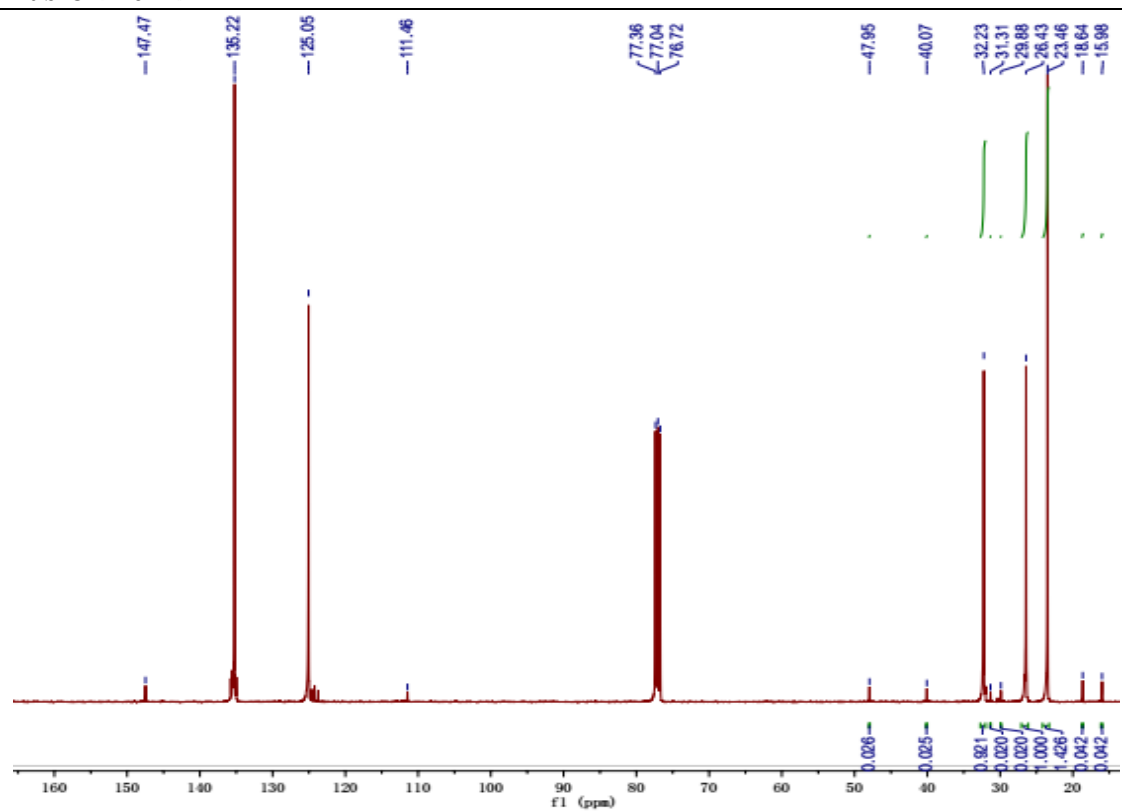


Table 2 Run-8

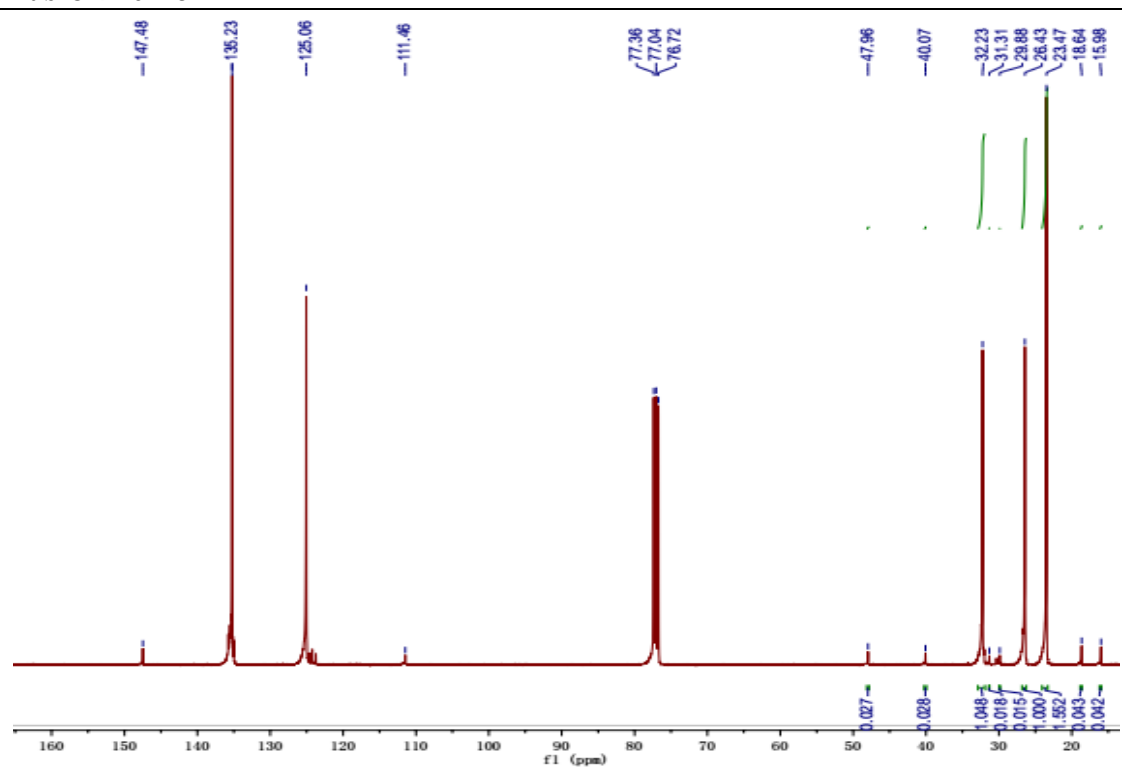


Table 2 Run-9

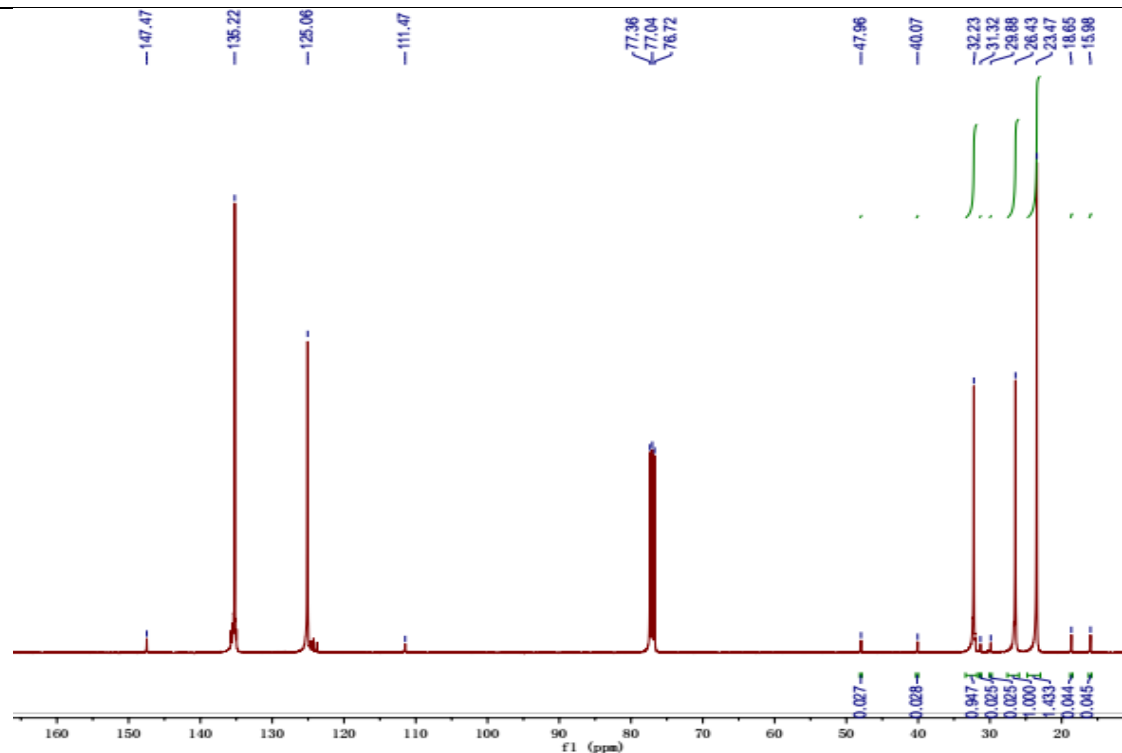
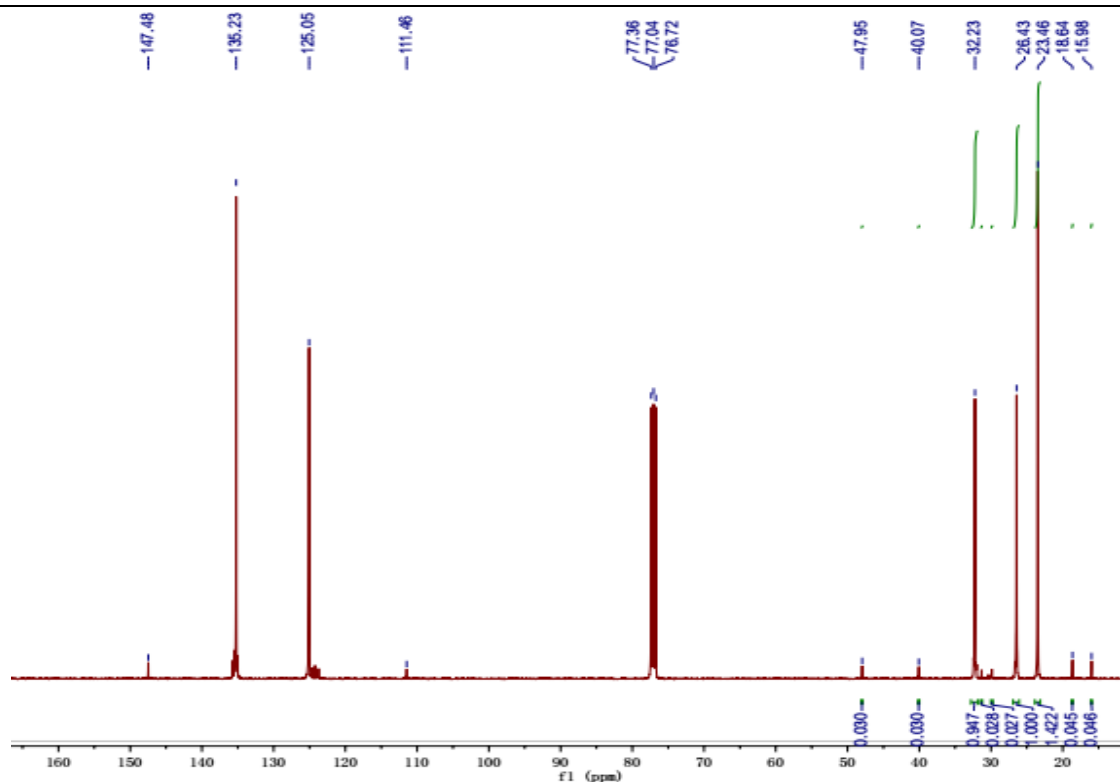


Table 2 Run-10



S6. Representative GPC plots for sPIR samples from complexes **1**, **2**, **3**-MMAO3A catalyst system, polymerization runs in **Table 2**.

Table 2 Run-1

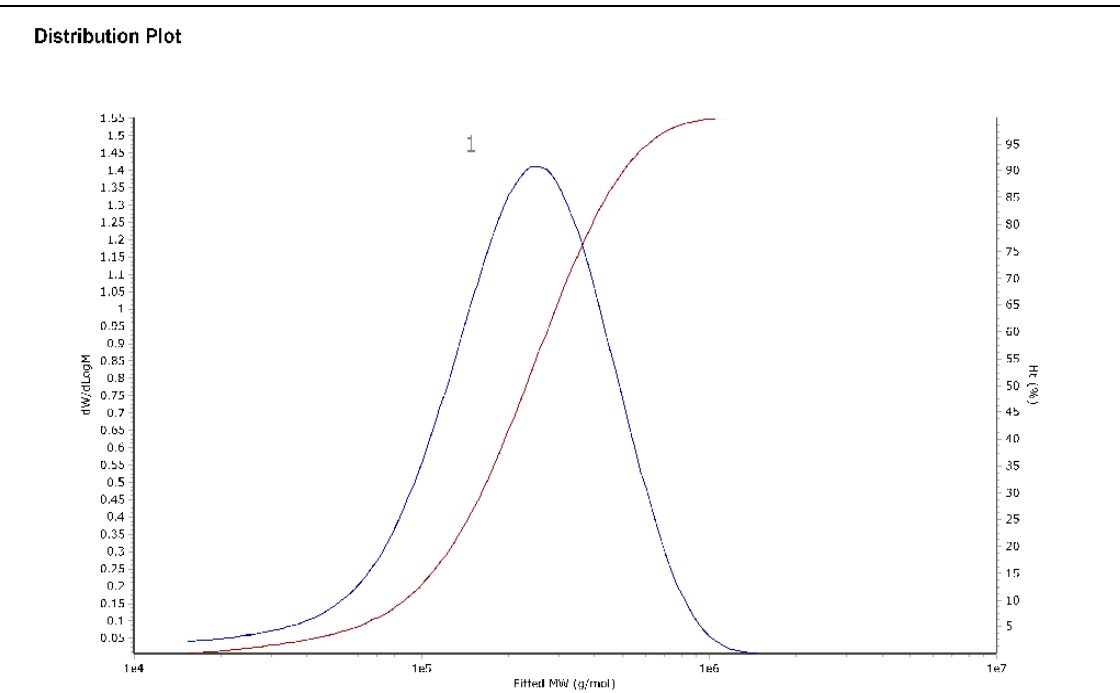


Table 2 Run-2

Distribution Plot

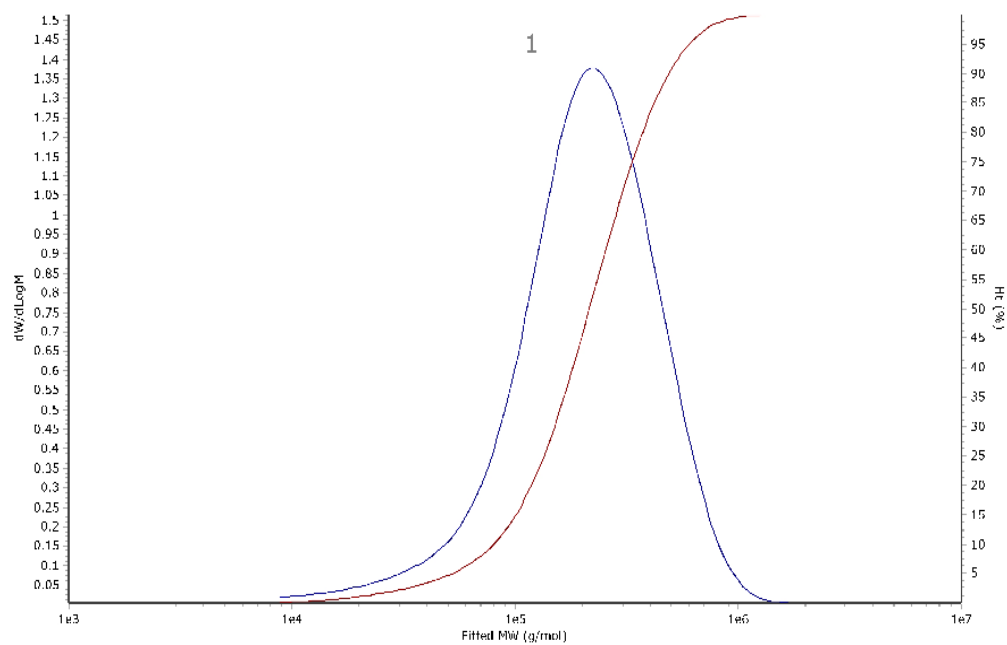


Table 2 Run-3

Distribution Plot

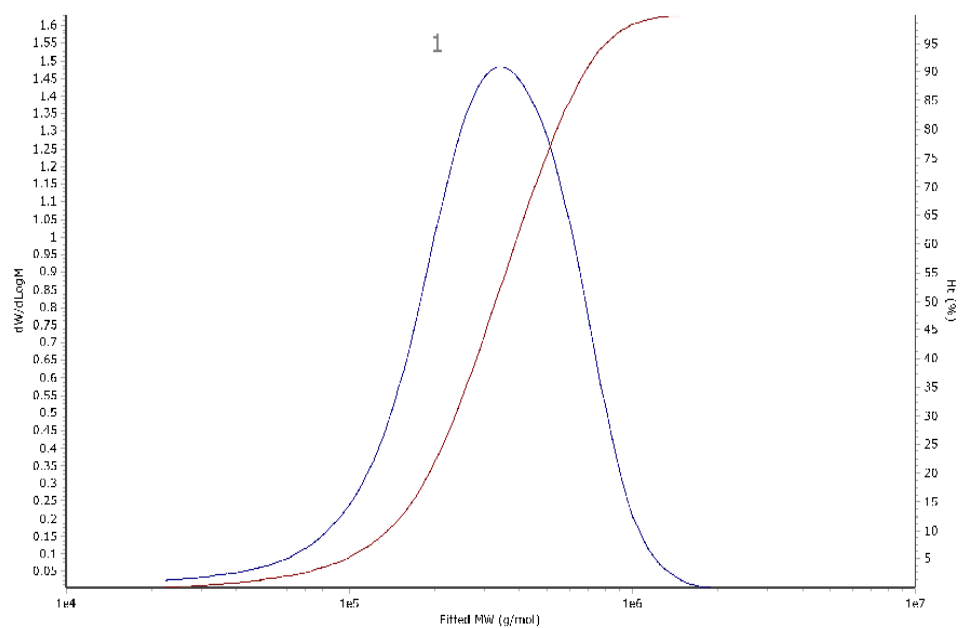


Table 2 Run-4

Distribution Plot

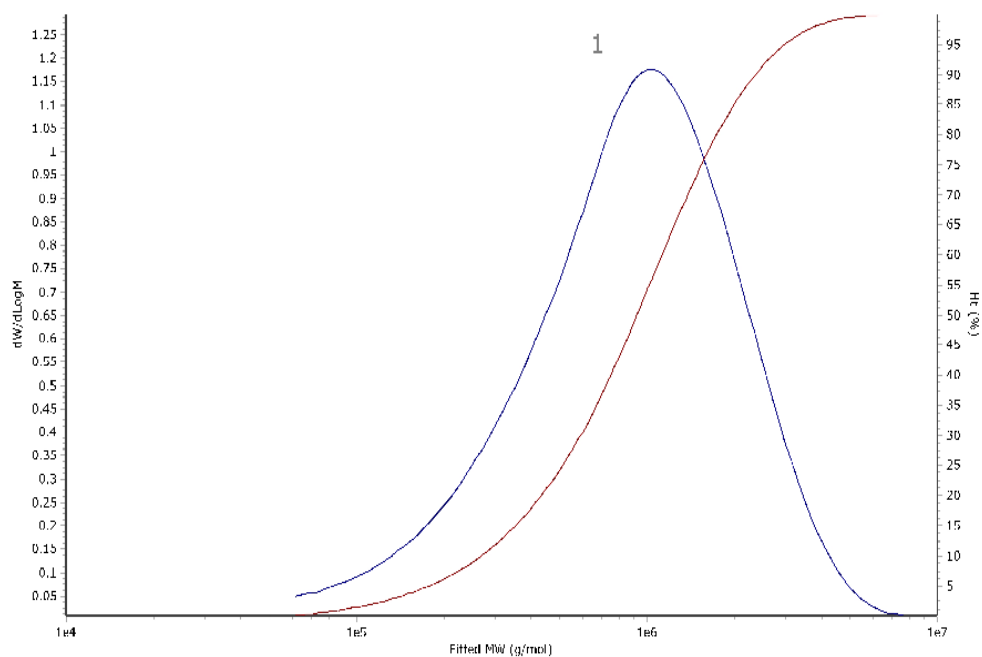


Table 2 Run-5

Distribution Plot

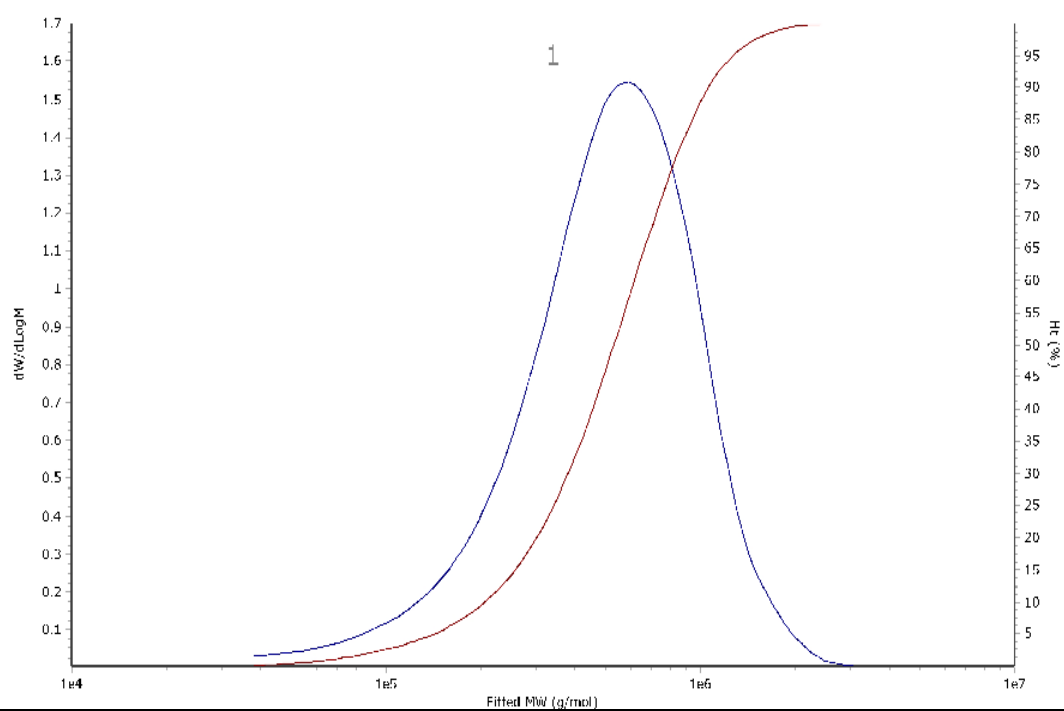


Table 2 Run-6

Distribution Plot

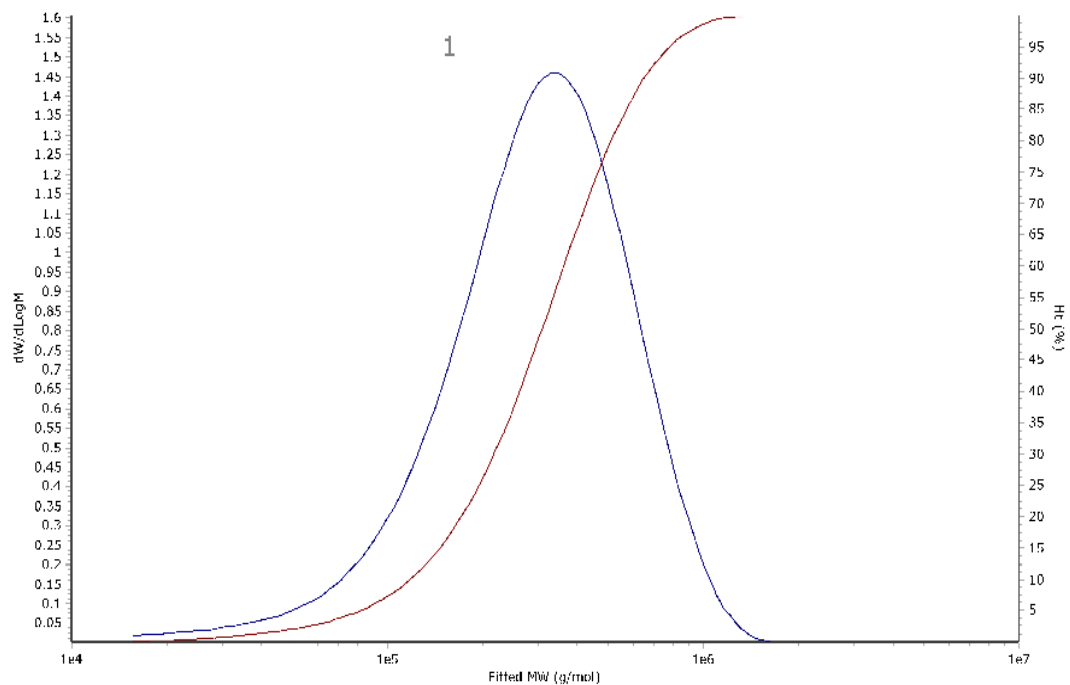


Table 2 Run-7

Distribution Plot

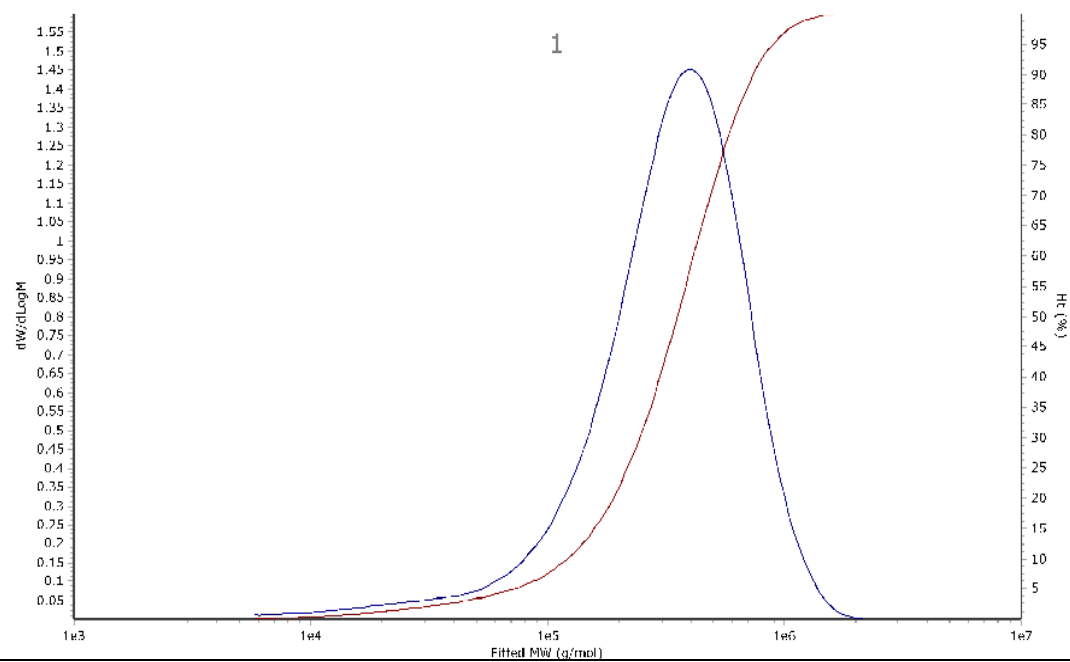


Table 2 Run-8

Distribution Plot

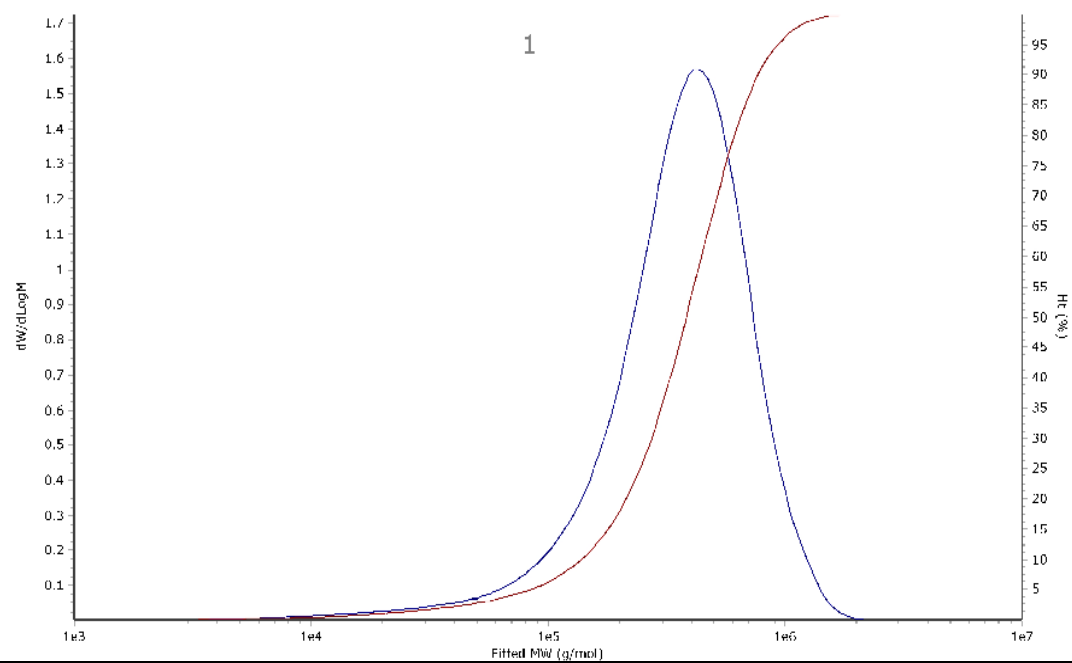


Table 2 Run-9

Distribution Plot

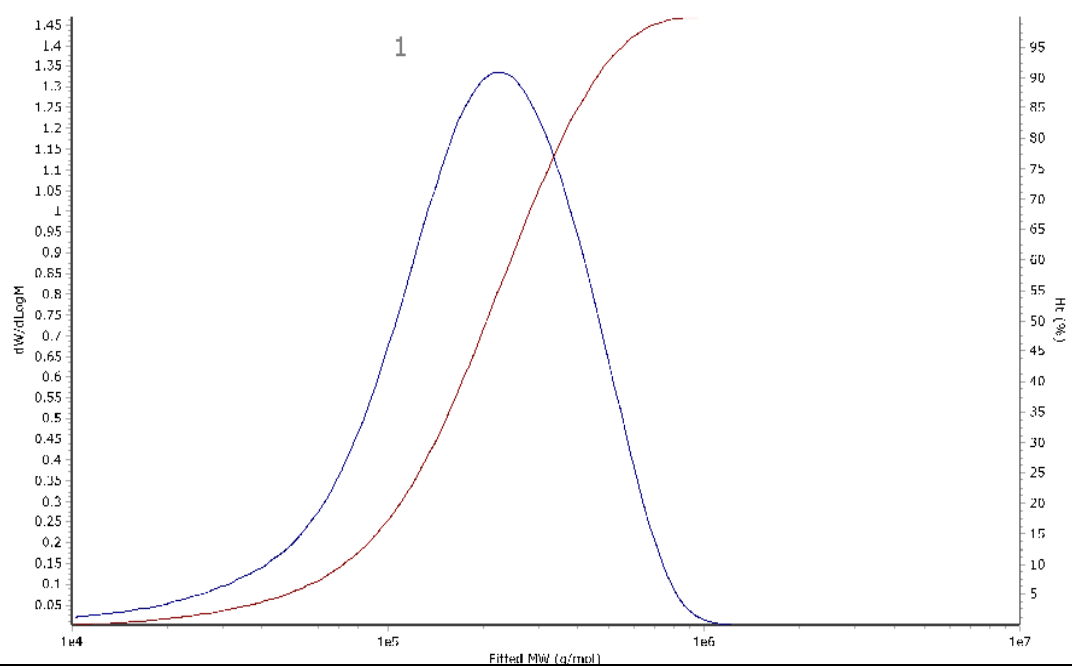


Table 2 Run-10

Distribution Plot

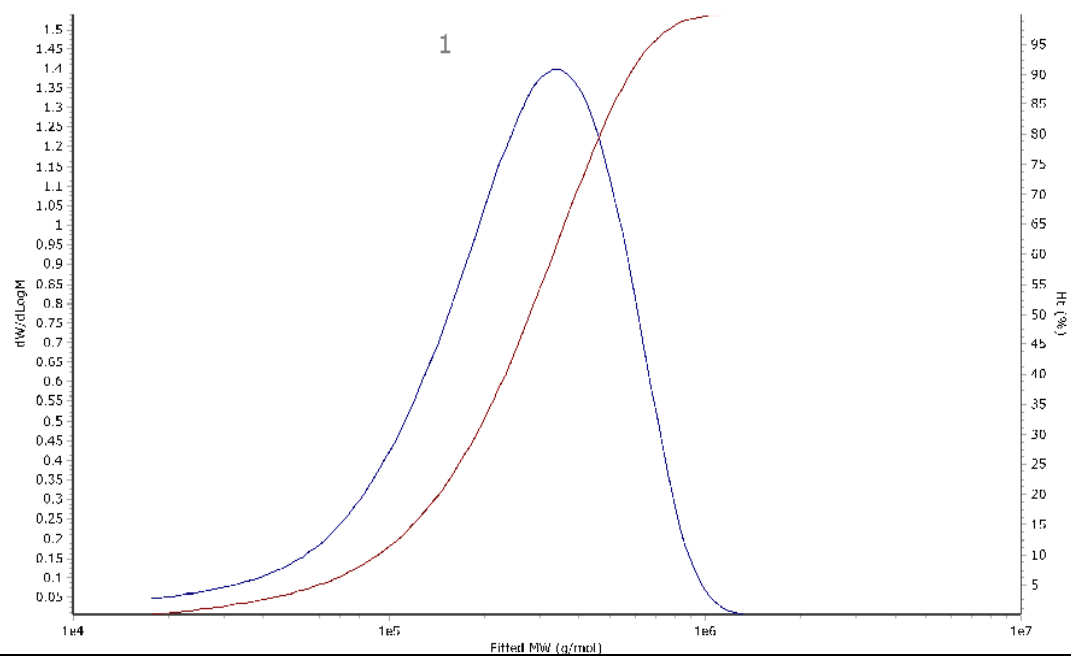


Table 2 Run-11

Distribution Plot

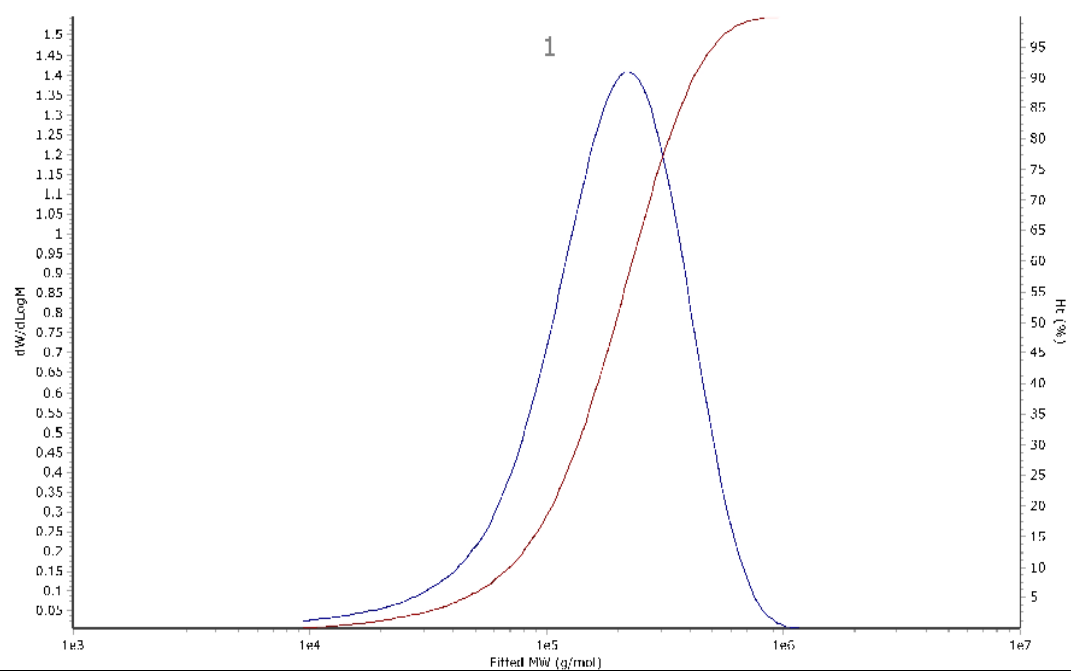


Table 2 Run-12

Distribution Plot

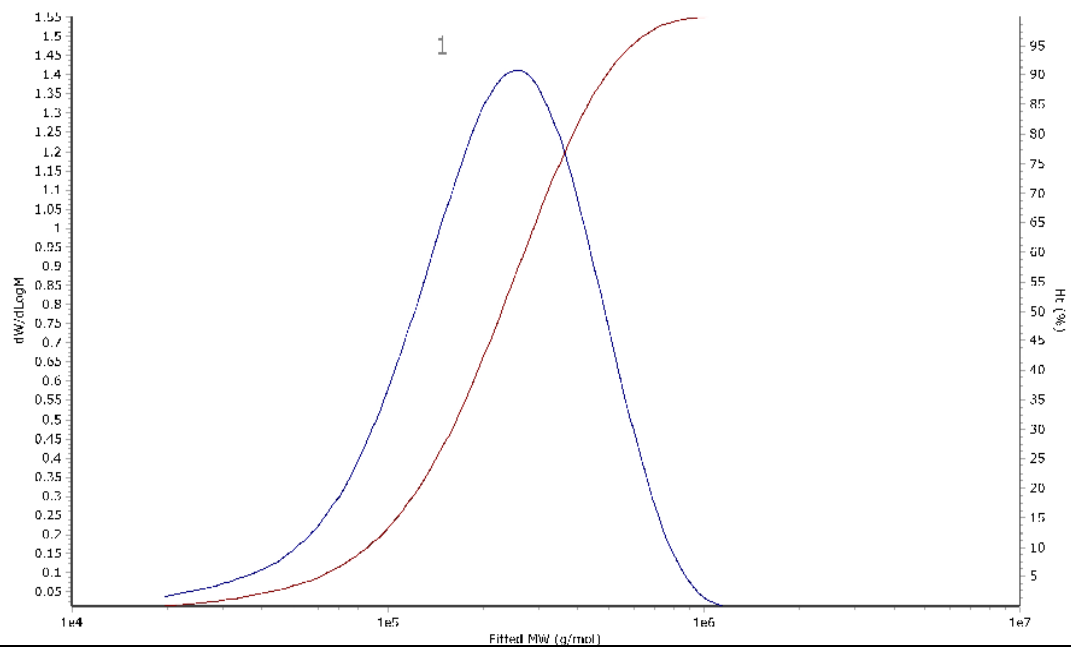


Table 2 Run-13

Distribution Plot

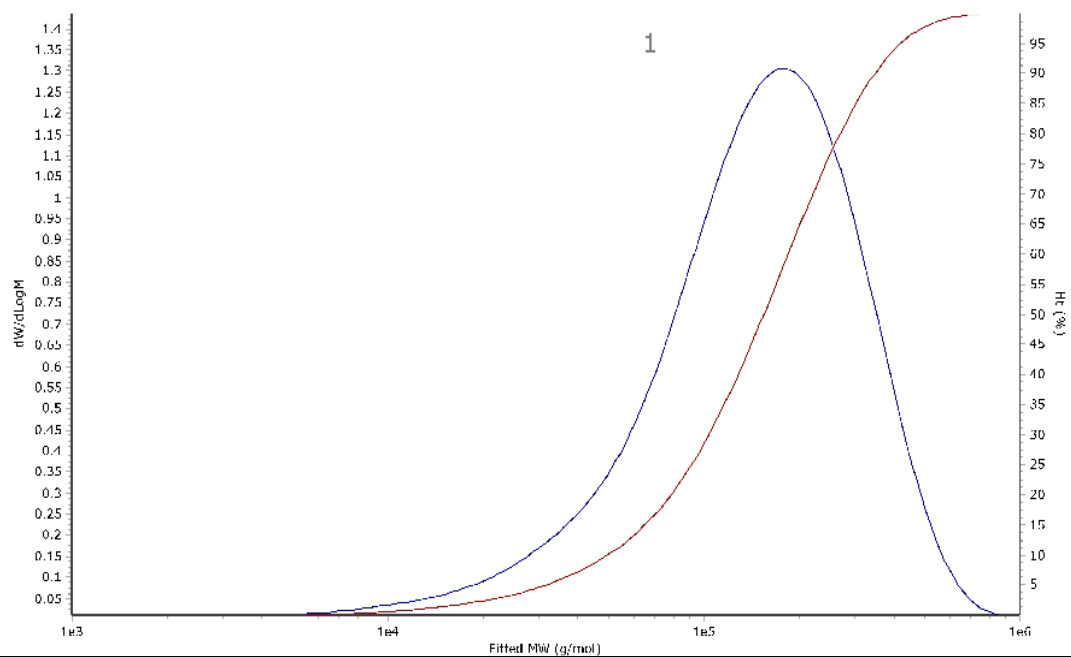


Table 2 Run-14

Distribution Plot

