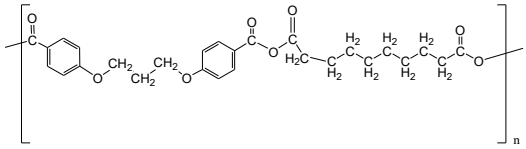
Sample Name: **Polyanhydride based on 1,3 bis(p-carboxyphenoxy) propane: sebacic acid**

Sample #: **P43589-CPPSA-Anh**

Structure:



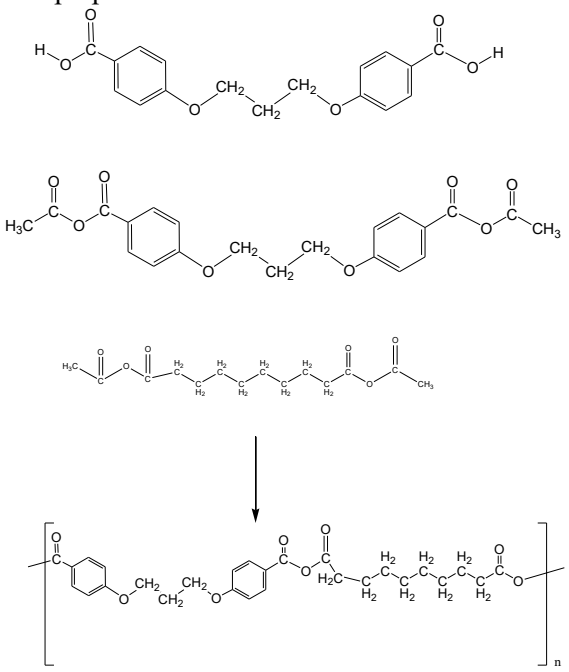
Composition:

[ŋ] Chloroform at 25 °C	Mw x 10^3	Mn x 10^3	Mw/Mn	Tg °C
0.50 dl/g	26.0	9.0	2.7	97

CPP: SA (ratio by weight) 18:82

Synthesis Procedure:

The following reaction scheme shows how the product was prepared:



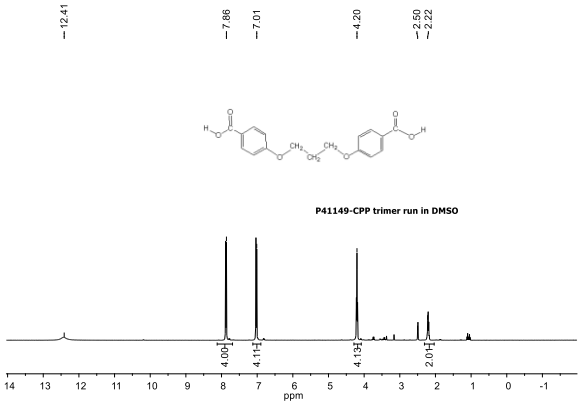
Characterization:

The product was characterized by ^{1}H-NMR spectroscopy, which is run in deuterated DMSO at 400MHz. The inherent viscosity of final polymer was determined by Ubbelohde capillary viscometer in chloroform at 25°C.

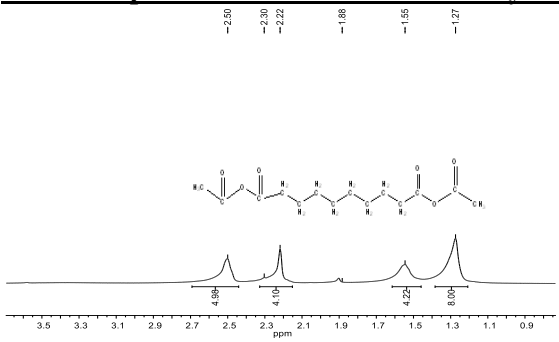
Solubility:

The polyanhydride is soluble in chloroform, and dichloromethane.

Figure: ^{1}H NMR spectrum of trimer-acid:

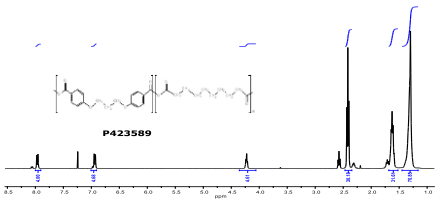


^{1}H NMR spectrum of Sebacic acid dianhydride:

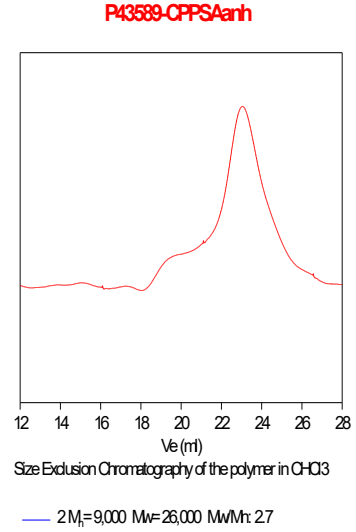


^{1}H NMR spectrum of the Polymer:

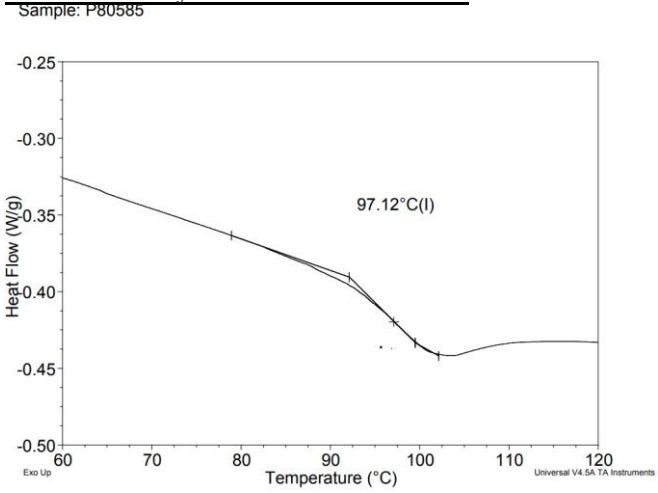
I: CdCl3



GPC profile of the polymer:



Thermal analysis data of CPP trimer:



Thermal analysis data of Poly anhydride: