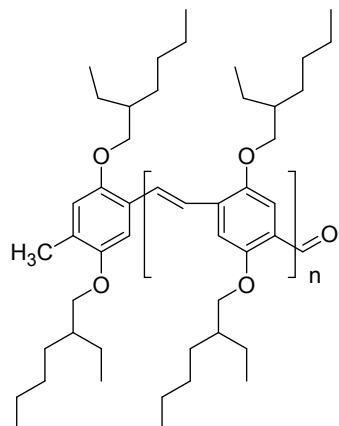


Sample Name:

Aldehyde End Functionalized Poly(2,5-di(2'-ethylhexyloxy)-1,4-phenylenevinylene)

Sample #: P14442A-DEHPVCHO

Structure:

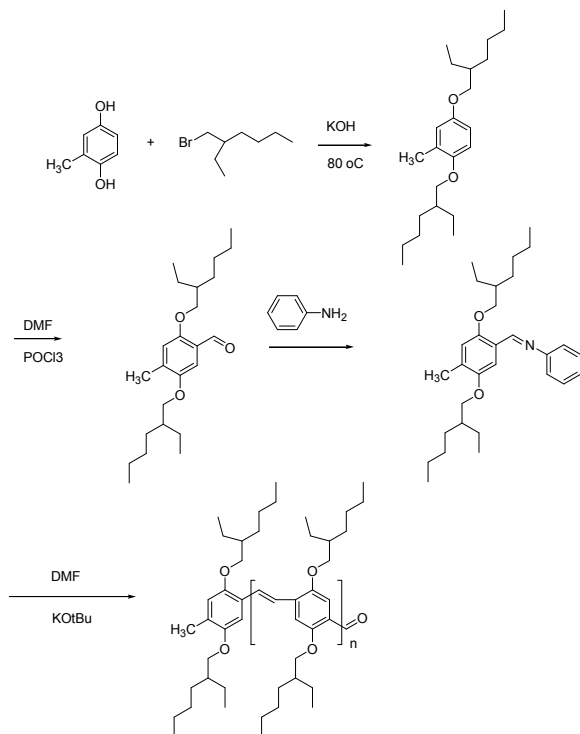


Composition:

Mn x 10 <sup>3</sup>	PDI
3.3	1.2

Synthesis Procedure:

DEH-PPV is synthesized by polymerization of Seigris polycondensation under basic condition in DMF, followed by hydrolysis in acidic water. The polymer was then dissolved in chloroform and washed with distilled water until neutral, dried over MgSO<sub>4</sub> and precipitated into cold methanol.



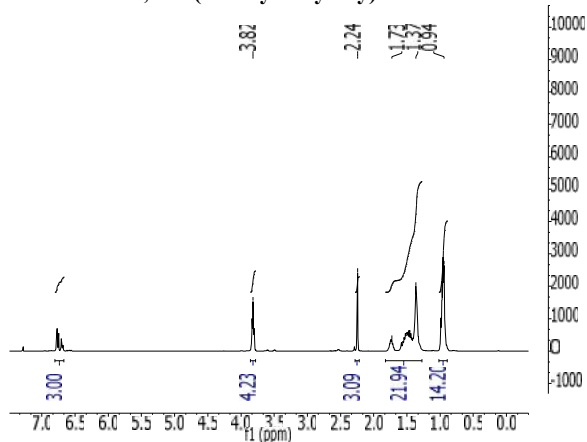
Characterization:

The molecular weight was obtained by <sup>1</sup>H NMR by comparing the end aldehyde group at 10.5 ppm to aromatic proton at 7.54 ppm or vinyl proton at 7.26 ppm.

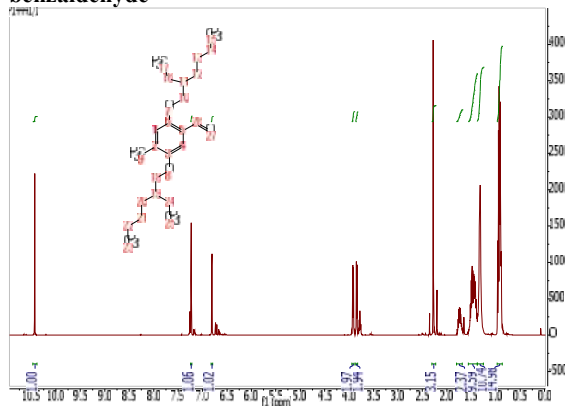
Solubility:

MEH-PPV is soluble in THF and CHCl<sub>3</sub>.

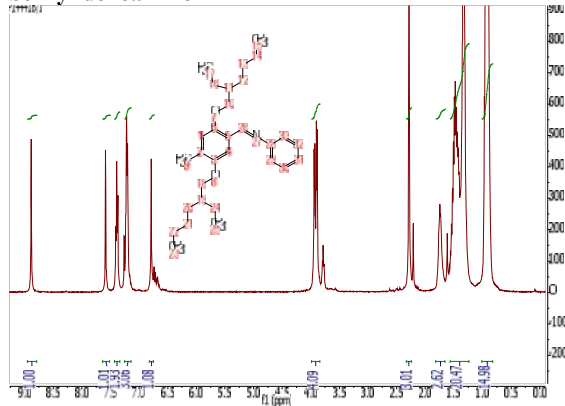
<sup>1</sup>H NMR of 2,5-Di(2'-ethylhexyloxy) toluene



<sup>1</sup>H NMR of 2,5-Di(2'-ethylhexyloxy)-4-methyl-benzaldehyde



<sup>1</sup>H NMR of 2',5'-Di(2''-ethylhexyloxy)-4'-methyl-N-benzylideneaniline



<sup>1</sup>H NMR of DEH-PPV

