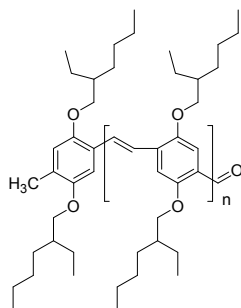


Sample Name:

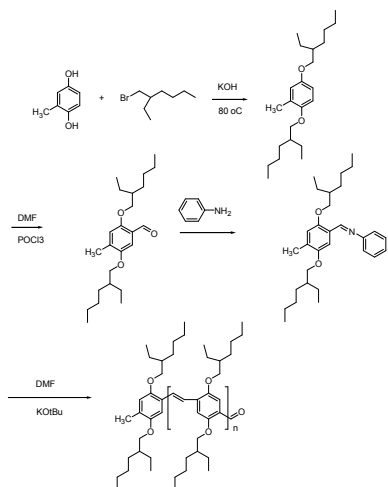
Aldehyde Terminated Poly(2,5-di(2'-ethylhexyloxy)-1,4-phenylenevinylene)

Sample #: P14448A-DEHPVCHO**Structure:****Composition:**

Mn x 10 ³	PDI
5.2	1.4
Dp of DEHPV: About 15 units	

Synthesis Procedure:

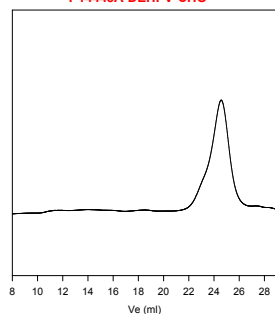
DEH-PV is synthesized by polymerization of Seigrist polycondensation under basic condition in DMF, followed by hydrolysis in acidic water. The polymer was then dissolved in chloroform and washed with distilled water until neutral, dried over MgSO₄ and precipitated into cold methanol.



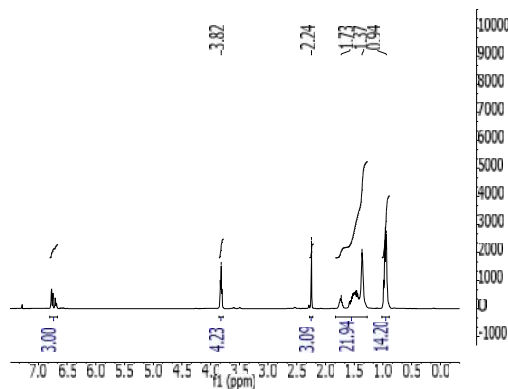
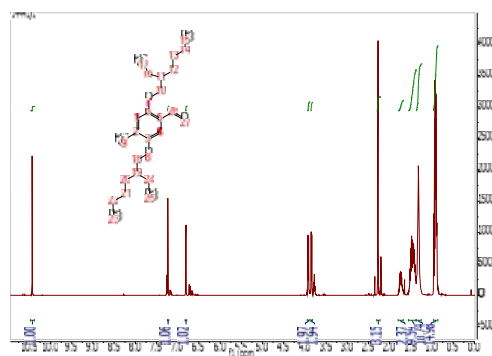
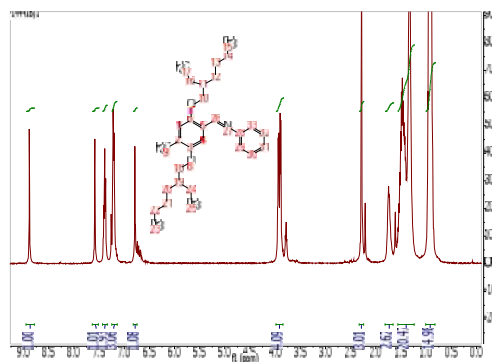
Characterization: The molecular weight was obtained by ¹H NMR by comparing the end aldehyde group at 10.5 ppm to aromatic proton at 7.54 ppm or vinyl proton at 7.26 ppm.

Solubility:MEH-PPV is soluble in THF, CHCl₃, hexane and toluene.

P14448A-DEHPV-CHO



Size exclusion chromatography of the Polymer
 — M_n=5200, M_w=7300, PDI=1.4

¹H NMR of 2,5-Di(2'-ethylhexyloxy) toluene**¹H NMR of 2,5-Di(2'-ethylhexyloxy)-4-methyl-benzaldehyde****¹H NMR of 2',5'-Di(2''-ethylhexyloxy)-4'-methyl-N-benzylideneaniline****¹H NMR of DEH-PPV**