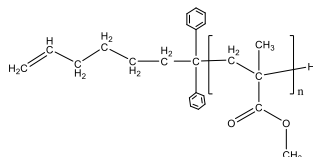


Sample Name: Poly (methyl methacrylate), α -vinyl-terminated; syndiotactic rich > 80%

Sample #: P42296-MMA Vinyl

Structure:



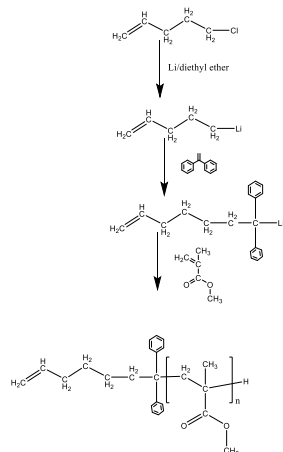
Composition:

Mn x 10 ³	PDI
9.5	1.01

Functionality:	100%
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Synthesis procedure:

The following reaction scheme shows how the product was prepared:



Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Agilent chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors.

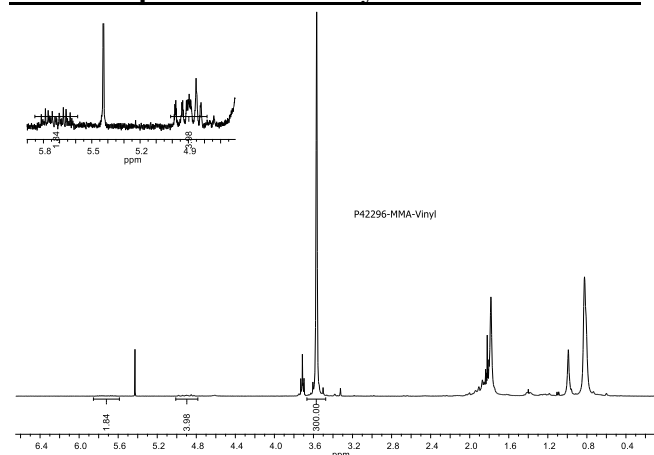
Functionality:

Functionality of the obtained polymer was determined by ¹H NMR.

Solubility:

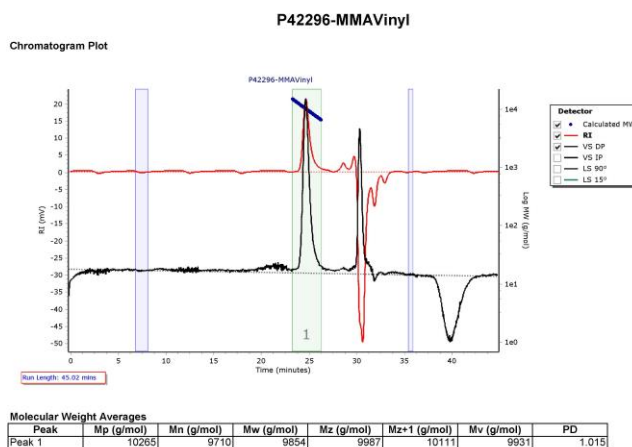
Vinyl-terminated PMMA is soluble in DMF, THF, toluene, and CHCl₃. It precipitates from methanol, hexane and water.

¹H NMR spectrum of the allyl terminated PMMA:



SEC elugram of the allyl-terminated PMMA:

Agilent GPC/SEC Software



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	10265	9710	9854	9967	10111	9931	1.015