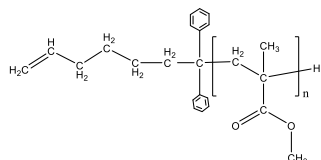


Sample Name: Poly (methyl methacrylate), α -vinyl-terminated; syndiotactic rich > 80%

Sample #: P42273-MMA Vinyl

Structure:

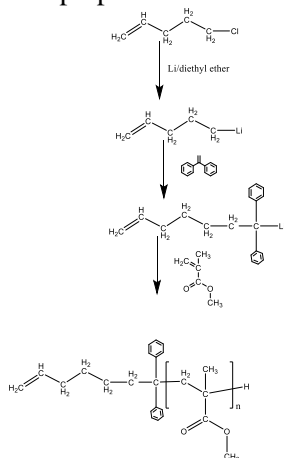


Composition:

$M_n \times 10^3$	PDI
25.5	1.01
Functionality:	100%

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 an Agilent chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors.

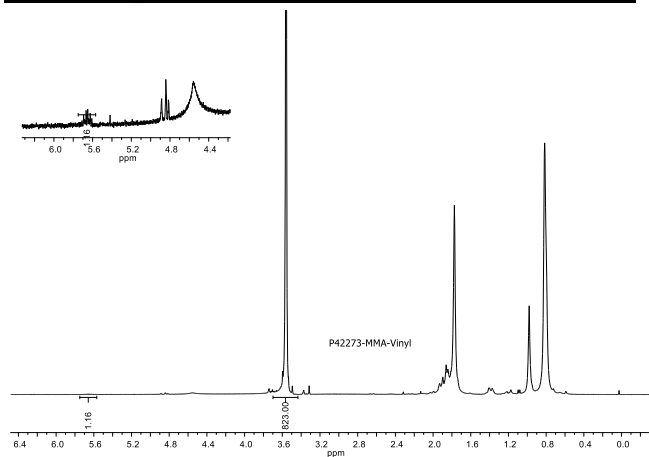
Functionality:

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

Solubility:

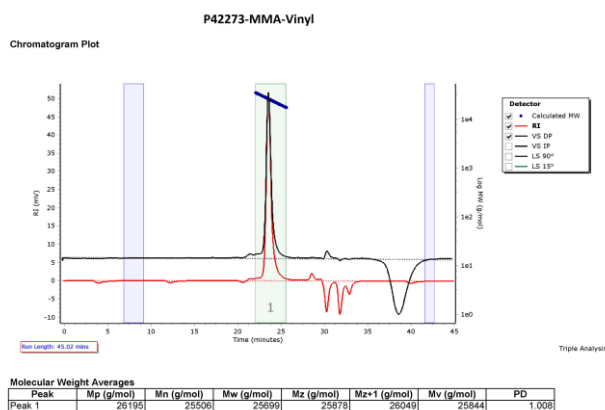
Vinyl-terminated PMMA is soluble in DMF, THF, toluene, and CHCl_3 . It precipitates from methanol, hexane and water.

^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	26195	25506	25699	25878	26049	25844	1.008