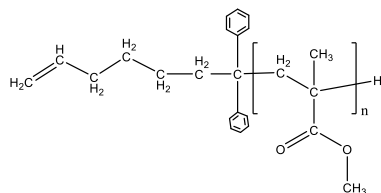


Sample Name: Poly (methyl methacrylate), α -vinyl-terminated; syndiotactic rich > 80%

Sample #: P42295-MMA Vinyl

Structure:

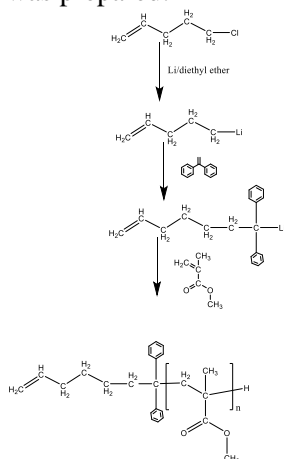


Composition:

Mn x 10 ³	PDI
9.0	1.02
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 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.

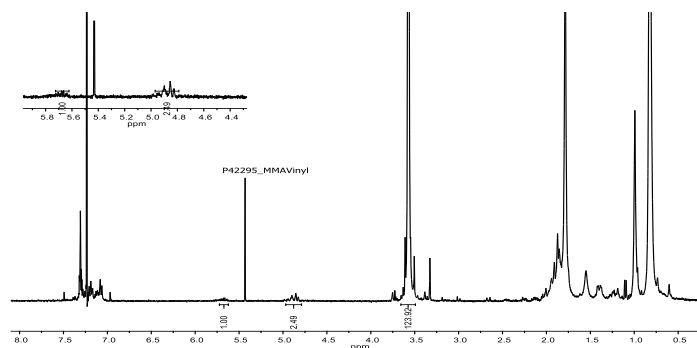
Functionality:

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, water.

¹H NMR spectrum of the allyl terminated PMMA:

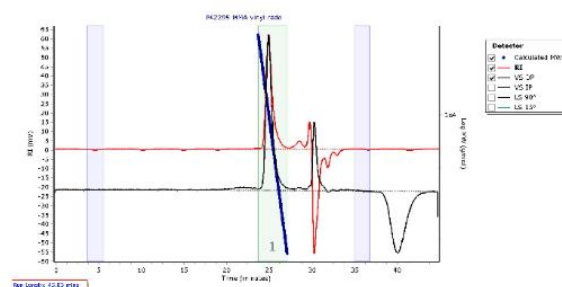


SEC elugram of the allyl terminated PMMA:

Agilent GPC/SEC Software

P42295-MMA vinyl redo

Chromatogram Plot



Molecular Weight Averages

Peak	M _p (g/mol)	M _n (g/mol)	M _w (g/mol)	M _z (g/mol)	M _z +1 (g/mol)	M _w (g/mol)	PDI
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Peak 1	10141	9411	9628	9819	9958	9788	1.023
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