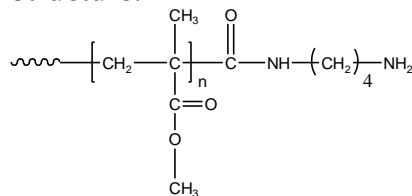


Sample Name:

Amino Terminated Poly(methyl methacrylate)
– Syndiotactic rich (>78 %)

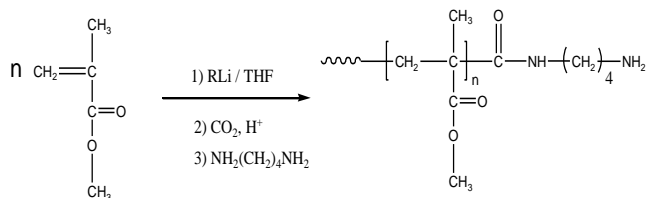
Sample #: P3542-MMANH₂

Structure:**Composition:**

M _n x 10 ³	PDI
80.0	2.00
NH ₂ functionality	>90%
T _g for the polymer	131°C

Synthesis Procedure:

Amino terminated polymethylmethacrylate is obtained by the chemical modification of the carboxylic acid terminated PMMA. The scheme of the polymerization reaction is illustrated below:

**Characterization:**

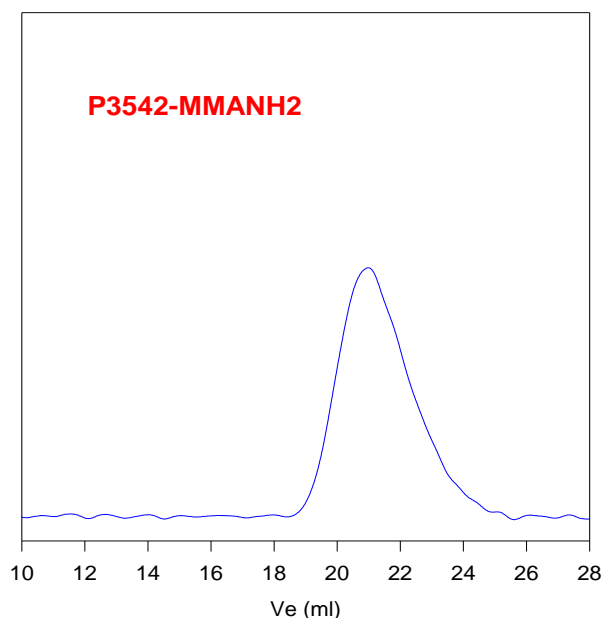
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector before the addition of the CO₂H function. Transesterification was verified by FT-IR to verify the disappearance of the t-butyl group.

Thermal analysis:

Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

Solubility:

The polymer is soluble in CHCl₃, THF and dioxane.

SEC of Sample:

Poly(methyl methacrylate) End-capped with 1-Naphthyl Isocyanate.
 Size Exclusion Chromatography of Amino Terminated

M_n=80000 M_w=160000, PI=2.0 functionality >0.99% (by titration)

DSC thermogram for the sample: