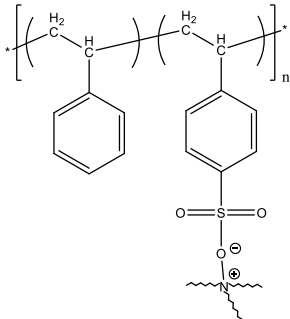


Sample Name: Ionomer of Poly (styrene-co-4-trioctyl ammonium styrene sulfonic acid)

Sample #: P42609A-SSSO3N-TriOct

Structure:



Composition:

Mn x 10 ³	Mole% of SO ₃ H	PDI
26.0	8 %	1.03

Synthesis Procedure:

Poly(styrene-co-4-styrene sulfonic acid) is synthesized by copolymerization of Styrene with trioctylammonium-4 styrene sulfonate partially sulfonation of monodispersed polystyrene.

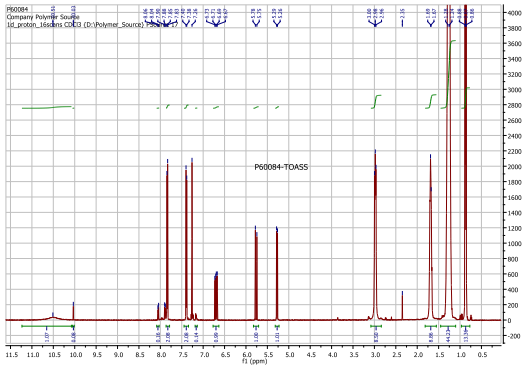
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ¹H-NMR data analysis.

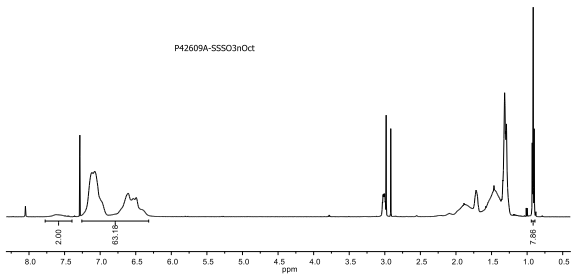
Solubility:

The polymer is soluble in CHCl₃, acetone, DMSO and methanol depending on the sulfonation degree.

¹H-NMR spectrum of Trioctylammonium -4-styrene sulfonate (TOASS) monomer:

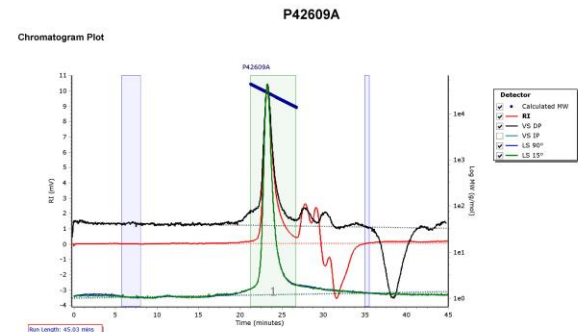


¹H-NMR spectrum of the Sample (CdCl₂):



SEC elugram of the sample:

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	28914	25955	26872	27666	28367	27877	1.035