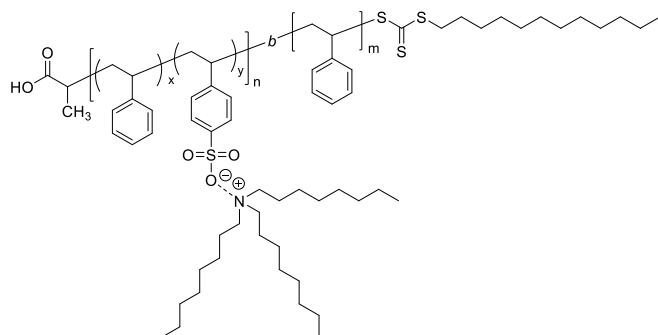


Product Name:

**Poly(styrene-*co*-4-trioctylammonium styrene sulfonic acid)-*block*-polystyrene**

Product # **P42551A-SSSO3NtOctran-b-S**

**Structure:**

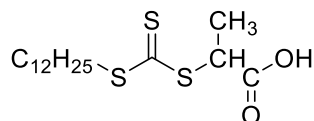


**Composition:**

$M_n \times 10^3$ (g/mol) [SSSO3NtOctran- <i>b</i> -S]	$M_w/M_n$	Sulfonation (1 <sup>st</sup> block):
15.5-14.0	1.02	4 mol%

**Synthesis Procedure:**

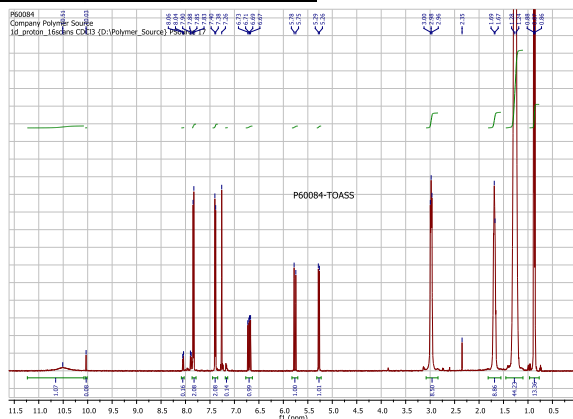
The polymer was synthesized by RAFT, using the following RAFT reagent:



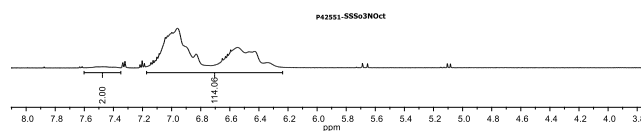
**Characterization:**

The product was validated by size exclusion chromatography (SEC, using triple detection method) and proton NMR spectroscopy analysis.

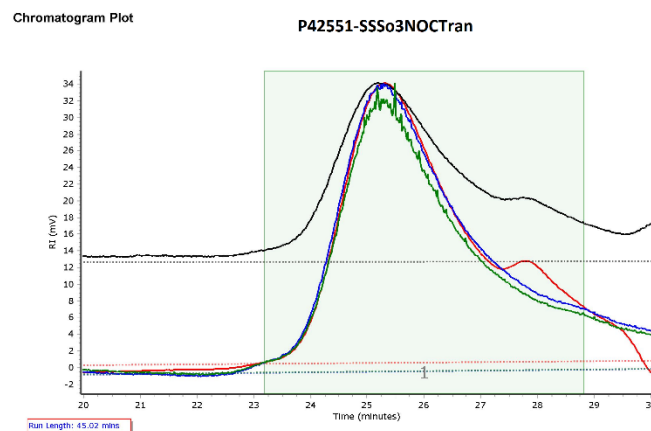
<sup>1</sup>H NMR spectrum of trioctylammonium-4-styrene sulfonate (TOASS) monomer:



<sup>1</sup>H NMR spectrum of the 1<sup>st</sup> block after sulfonation:



SEC of the 1<sup>st</sup> block (copolymer):



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)
Peak 1	15986	15566	15597	15627	15657	15638

SEC of the diblock copolymer (final product):

