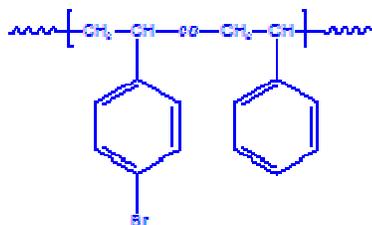


Sample Name:

Random Copolymer Poly (styrene-co-4-bromostyrene)

Sample #: P19325A-SSBrran

Structure:



Composition: 4BrS: 5 mol %

Mn x 10 ³	PDI
PS-co-PSBr	
61.0	1.10

Synthesis Procedure:

Random Copolymer Poly (styrene-co-bromostyrene) is prepared by controlled radical polymerization of styrene and bromostyrene.

Characterization:

The polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The copolymer composition was calculated from ¹H-NMR spectroscopy by comparing the peak area the aromatic protons of styrene at about 7.05 ppm with the methyl ester protons of methyl methacrylate at about 3.6 ppm.

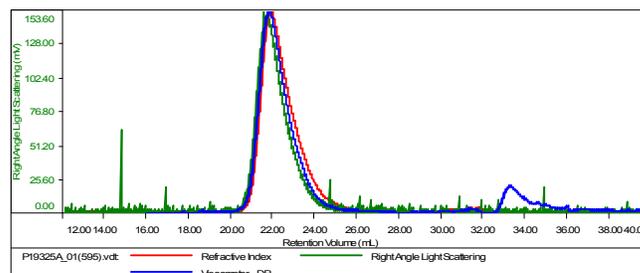
Solubility:

Random copolymer poly (styrene-co-methyl methacrylate) is soluble in CHCl₃, THF, DMF, and toluene and precipitated out from methanol.

SEC of the random copolymer:

Sample ID:P19325A-S4BrSran

Concentration (mg/mL)	4.0304
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-June26-2015-0001.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19325A_01(595).vdt	61,212	67,909	73,824	1.109	0.5017

