

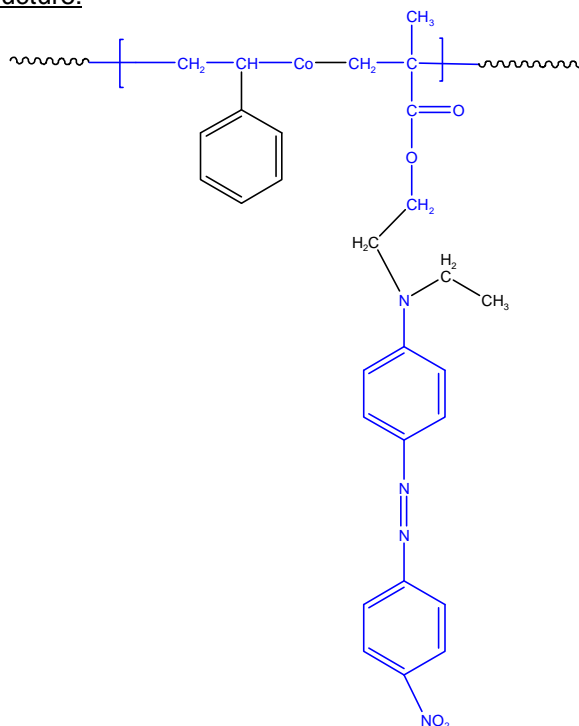
Sample Name:

Random Copolymer Poly(Styrene-co-Disperse Red-1 Methacrylate)

or: Random copolymer of styrene with *N*-Ethyl-*N*-(2-hydroxyethyl)-4-(4-nitrophenylazo)aniline methacrylate

Sample # **P147777B-SDR1-MAran**

Structure:



Composition: PS (mol%) : 99

Mn x 10 ³ PS-co-PDR1MA	PDI
161.0	1.4

Synthesis procedure:

The polymer is prepared by controlled radical (RAFT) process.

Solubility:

The polymer is soluble in acetone, insoluble in ether, hexane.

Characterization:

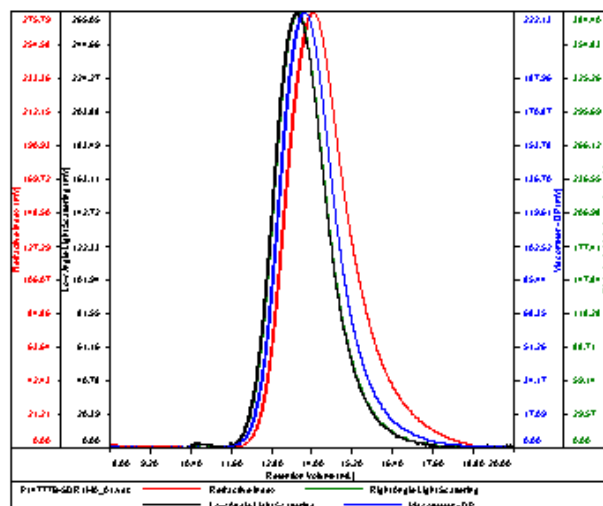
The copolymer composition was calculated from ¹H-NMR spectroscopy.

The molecular weight and polydispersity index were determined by size exclusion chromatography (SEC) in THF at 35°C.

SEC elugram:

SAMPLE ID: P147777B-SDR1-MA

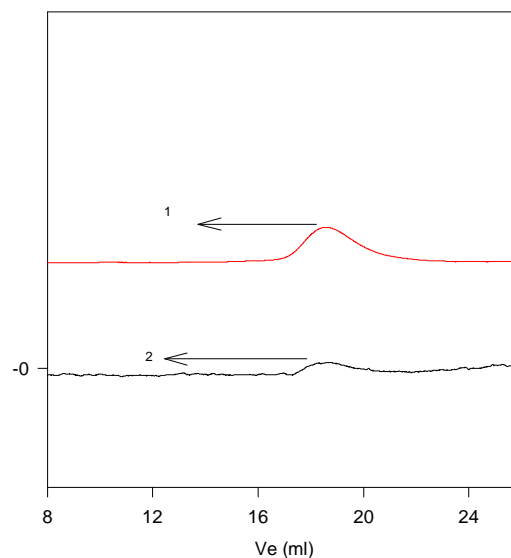
Conc (mg/mL)	11.4585
dn/dc (mL/g)	0.1600
Method	PSSDK-AU0201+0000.ucm
Bufluent	DHAF w 0.03M UBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P147777B-SDR1MA_01.ucl	161,430	225,034	227,511	1.394	0.4314

SEC with UV-vis detection at 522nm:

P147777B-SDR1MAran



Size exclusion chromatograph of random copolymer: poly(S-co-DR 1-MA):
Showing UV detection at 522nm

- 1: RI signal
- 2: UV at 522nm