

Sample Name:

Deuterated Polybutadiene,

1,2-addition: 20.5% by FT-IR; 25% by ^1H NMR.

Sample #: **P1450-dBd**

Composition:

$M_n \times 10^3$	PDI
400.0	1.10

Synthesis Procedure:

Deuterated polybutadiene was obtained by living anionic polymerization of d_6 -butadiene monomer.

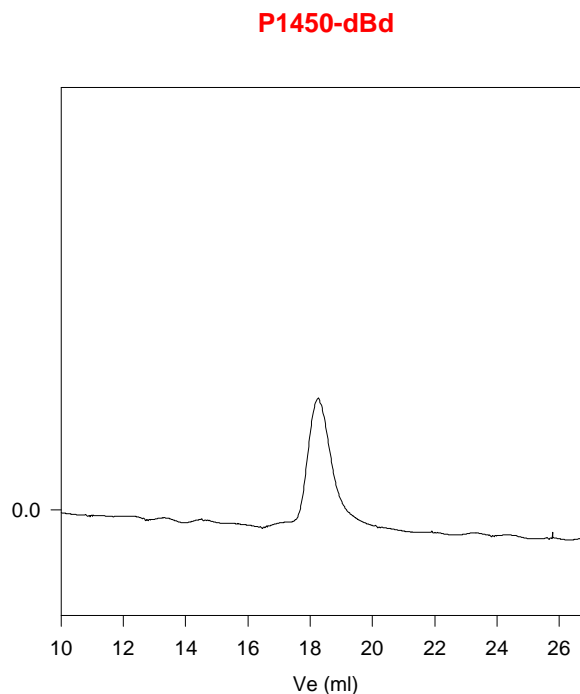
Characterization:

The molecular weight and polydispersity index (PDI) of the deuterated poly butadiene are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors from Viscotek Co. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used.

Solubility:

The polymer is soluble in toluene, THF, CHCl_3 .

SEC elugram of the polymer:



Size exclusion chromatography of deuterated polybutadiene(d_6):
 $M_n=400,000$, $M_w=440,000$, $M_w/M_n=1.10$