

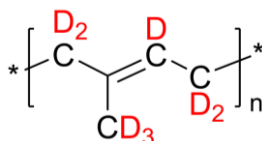
Product Profile

Identification

Product Name: Deuterated Poly(1,4-isoprene-d8)

Product Lot Number: P44618-dIp

Structure:



Composition:

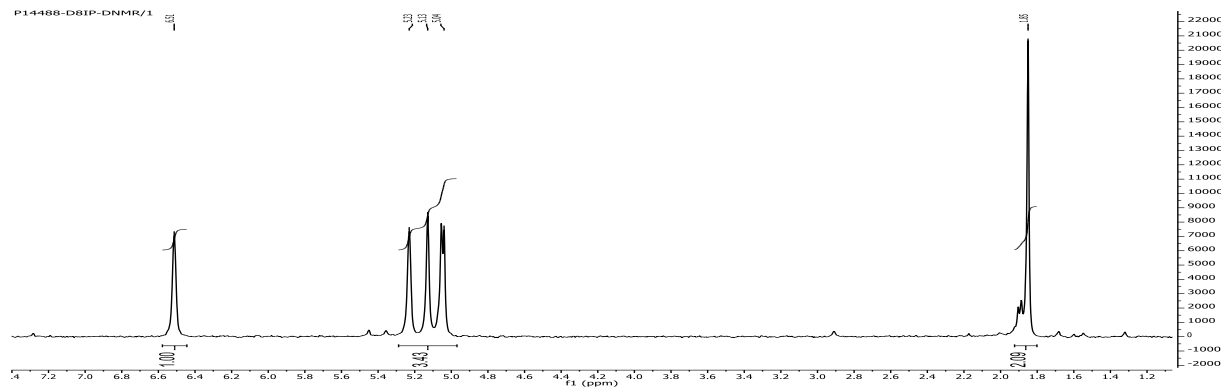
Mn x 10 ³	Mw/Mn (PDI)	dn/dc in THF
4.5	1.09	0.125ml/g

Method of Synthesis. Polyisoprene is obtained by anionic polymerization of deuterated (d8) isoprene. NMR of the monomer: Sample #: **d8Ip** (Lot# P14488)

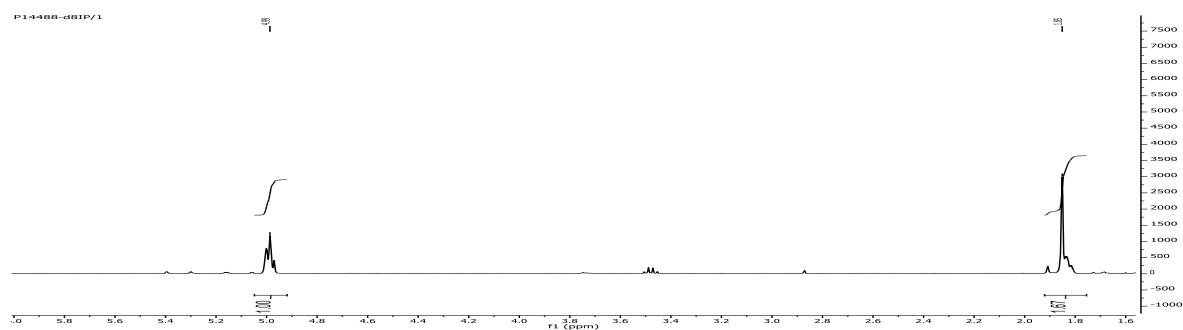
Characterization:

FW	76.11
CAS number	78-79-5 for protonated analog
Chemical Purity	97%
D% Methyl Deuterium	About 80%
D % on Vinyl group	About 95%

²D NMR spectrum of d8IP monomer:



¹H NMR spectrum of d8IP monomer:



Sol

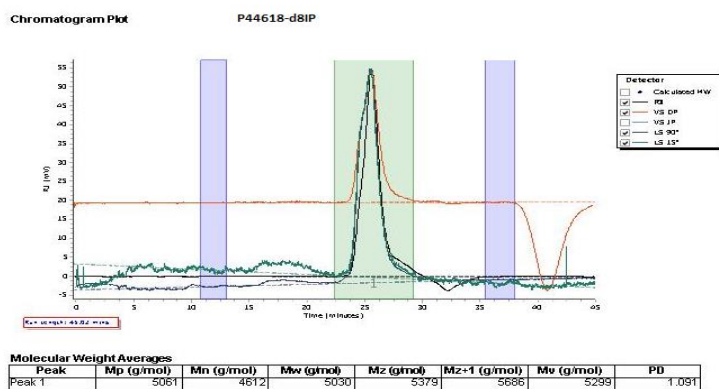
ubility of polymer in different solvents

THF	✓	Hexane	✓
CHCl ₃	✓	Acetone	X
Toluene	✓		

Purification of Polymer: By column chromatography.

Validation of Architecture:

A. Gel Permeation Chromatography (GPC), SEC- Profile:



FTIR spectrum of Polymer:

