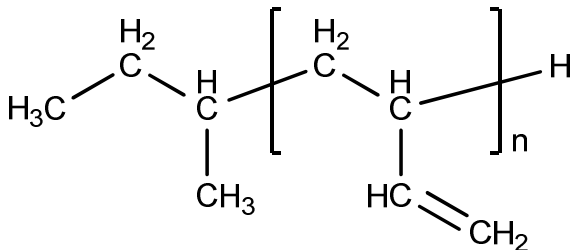


Sample Name: Polybutadiene (1,2-addition)

Sample #: **P19860-Bd**

Structure:



Composition:

Mn x 10 ³	PDI
2.1	1.07

PBd 1,4-addition	<1 %
PBd 1,2-addition:	>99 %

Glass transition temperature (T _g):	-27°C
---	-------

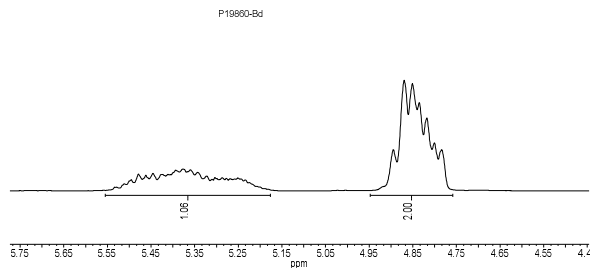
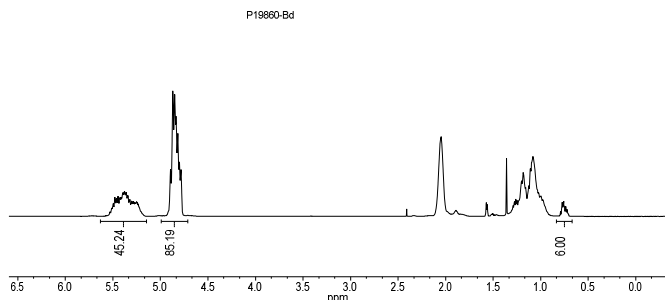
Synthesis procedure:

1,2-addition polybutadiene was prepared by anionic living polymerization of butadiene in non-polar/polar media.

Characterization:

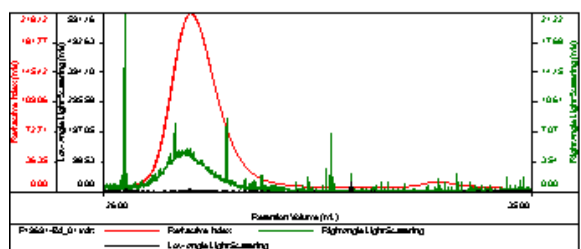
The polymer was characterized by ^1H NMR and SEC.

¹H NMR spectrum (500 MHz, CDCl₃) of polybutadiene:



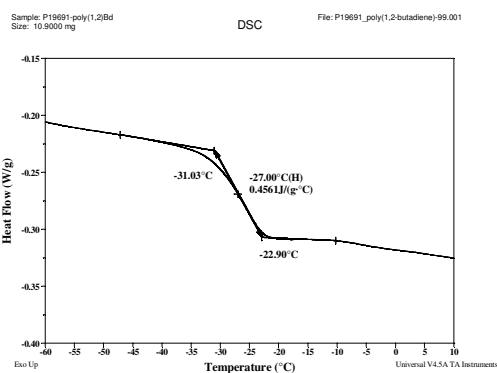
SEC elugram:

Sample ID#19860-Bd	
Concentration (mg/mL)	4.8mg
Sample dilute (mL/g)	0.125
Method File	MSDC16161620150001.i
Column list	3. PL1105000
Solvent	THF



Sample	MW by endgroup	MW by GPC	Polydispersity	Intrinsic viscosity (dL/g)	Hydrogenam (% in solvent)	Peak Retention (% in solvent)
BL01.VK	2,099	2,189	1.061	0.1816	2.82	27.768

DSC thermogram of P19860-Bd:



Reference: Thermal transition of PBd.

Polybutadiene (Mn=2.2–2.4 x 10 ³)	Tg
1,2-addition: 78 %	–35°C
1,2-addition: 89 %	–29°C
1,2-addition: 99 %	–27°C