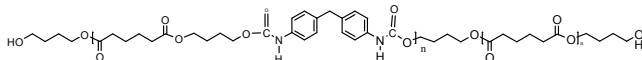


Sample Name:

Poly urethane based on Adipic acid ,Butane diol and 4,4'-Methylenebis(phenyl isocyanate) MDI-based polyurethanes

Sample #: **P19253-PU**

Structure:



Composition:

Mw x 10 ³	Mw/Mn (PDI)	Composition Adipic acid: Butanediol:MDI	Tg (°C)
28.0	1.7	1:1:1	-15.1

Mn of Oligomers around 2,000

Synthesis Procedure:

Polyurethane is prepared in two-step procedure A: oligomerization of Adipic acid with Butane diol and then B reaction with MDI.

Characterization:

An aliquot of the copolymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The chemical composition was verified by ¹H-NMR spectroscopy, which is run in deuterated chloroform at 500MHz. The glass-transition temperature was measured by DSC.

Solubility:

Chloroform (y)	THF (Y)	DMF (Y)	DMSO (Y)
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Figure: ¹H NMR spectrum

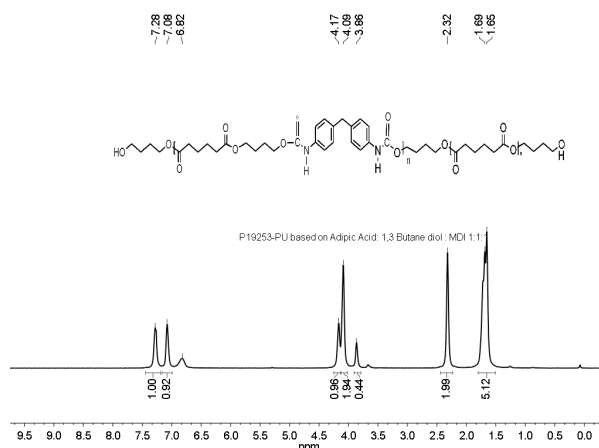
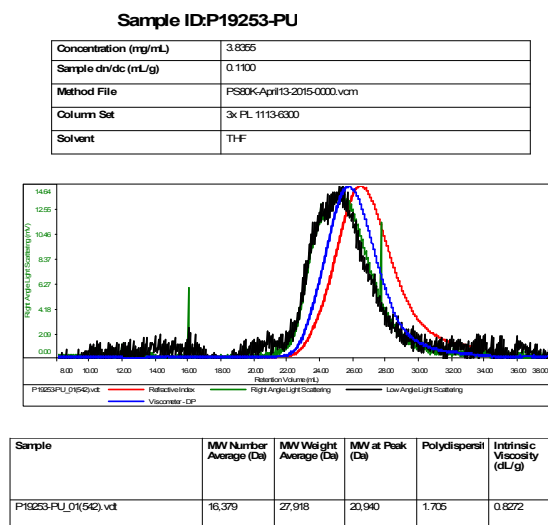


Figure: SEC profile of the polyurethane



DSC Thermogram:

