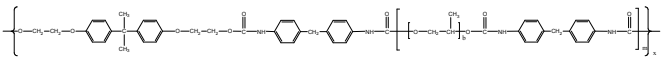
Sample Name:
Poly urethane based on Bisphenol A-diethoxylate and propylene glycol and MDI-isocynate.

Lot Sample #: **P7281-PU**

Structure

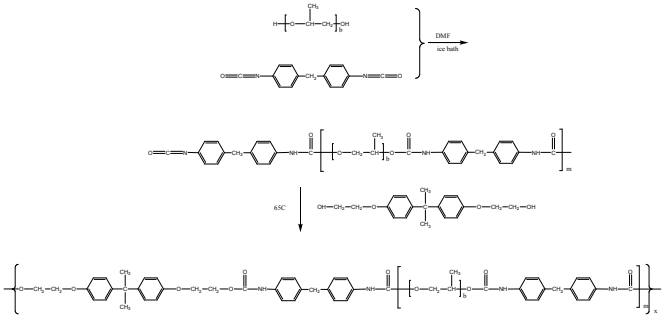


Composition

Mw x 10^3	Mw/Mn (PDI)	Composition
259.4	4.7	MDI:PPO:BPAEO 1.8:1.0:0.81
		From HNMR 1.8:0.7:0.54

MDI: 4,4'-Methylenebis(phenyl isocyanate)
PPO: Poly propylene glycol Mn=725
BPAEO: BisphenolA diethoxylate

Synthesis Procedure:
The synthesis method was followed the literature offered by costumer. The scheme of the reaction is illustrated below:

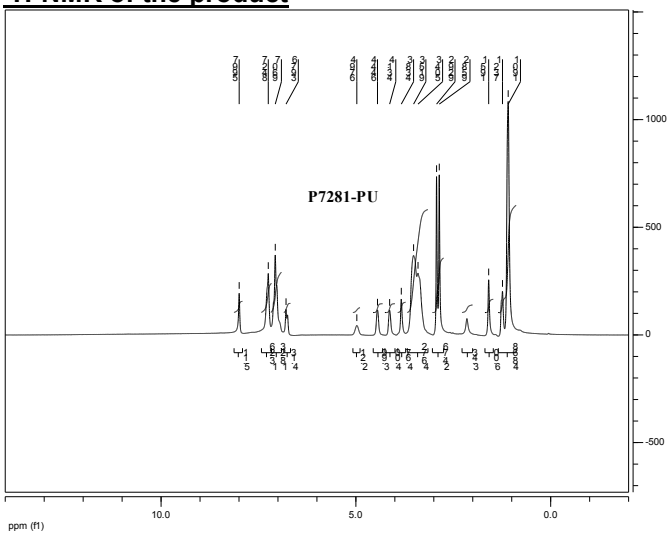
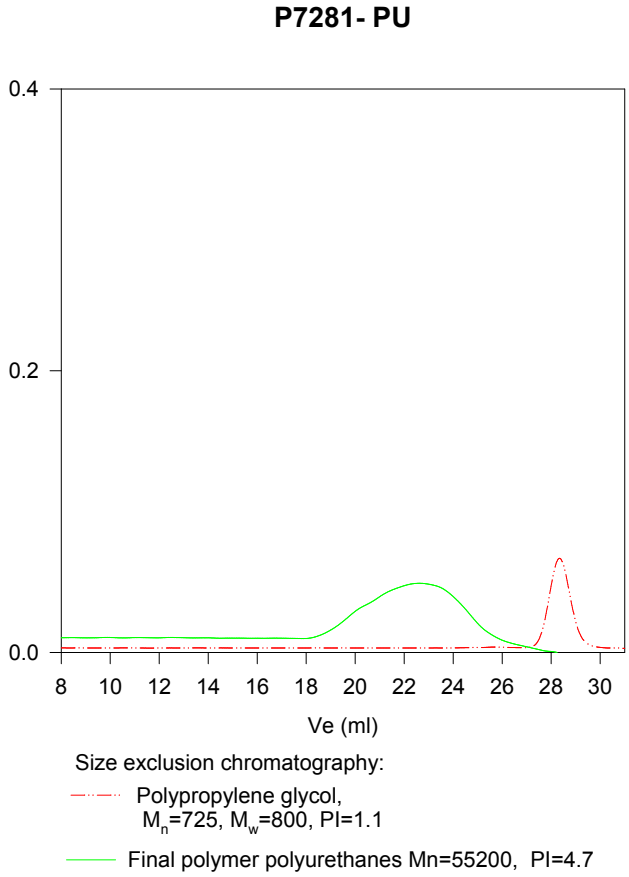


Characterization:
The polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight, polydispersity index (PDI). The composition of the structure was determined by comparing the area of 7.24ppm (MDI), 1.0-1.4ppm (PPG) and 1.59ppm (BOAEO) in NMR spectrum.

Solubility:

MDI:PPO:BPAEO (1.8:1.0:0.81)	Chloroform Y	DMF Y	THF Y	DMSO Y (slow)	Tg oC 25

^{1}H-NMR of the product



SEC of the product: