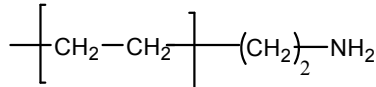


Sample Name:

**Amino terminated Polyethylene**

Sample #: **P6119-ENH2**

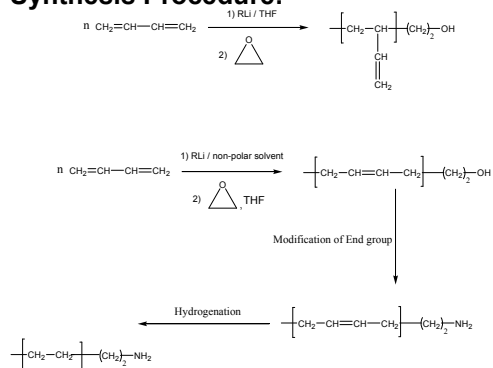
**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
4.2	1.05

**Synthesis Procedure:**



**Characterization:**

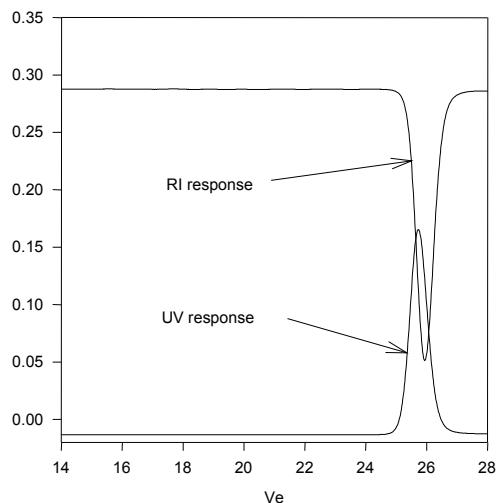
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography. The hydrogenation of polybutadiene is confirmed by FT-IR with disappearance of the alkene double bond.

**Solubility:**

Polyethylene is soluble in hot toluene and hot xylene. The polymer is insoluble in hexane, methanol and ethers.

**SEC of Sample #**

**P6119-BdNH2 (1, 4 addition)**  
**Precursor for P6119-ENH2**



— Mn: 4100 Mw: 4300 Mw/Mn 1.05 Functionality: > 98%  
— UV response at 290nm after end capping NH2 group with 1-Naphthyl isocyanate  
After Hydrogenation: Mn 4200 degree of Hydrogenation over 90% from FTIR

**Thermal analysis of the sample# P6119-ENH2**

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min.

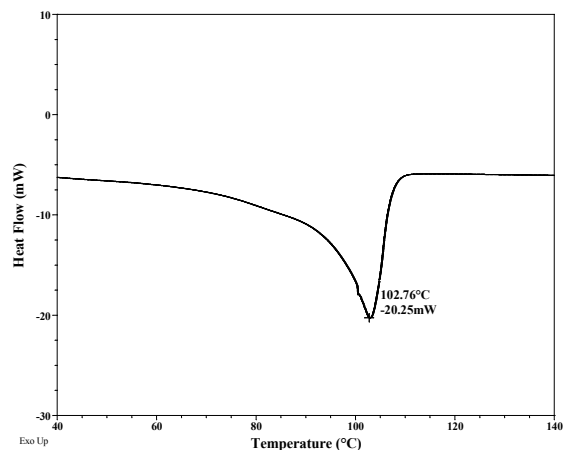
**Melting and crystallization curve for the sample**

The melting temperature (T<sub>m</sub>) was taken as the maximum of the endothermic peak where as the crystallization temperature (T<sub>c</sub>) was considered as the minimum of the exothermic peak.

**Thermal analysis results at a glance**

Sample	T <sub>m</sub> (°C)	T <sub>c</sub> (°C)	T <sub>g</sub> (°C)
P-6119-ENH2	102	89	None

**Melting curve for the sample:**



**Crystallization curve for the sample:**

