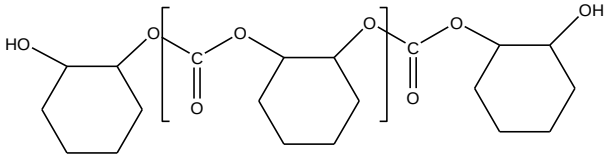
Sample Name: **α,ω-dihydroxy-terminated poly(cyclohexene carbonate)**

Sample #: **P41269-CHC**

**Structure:**




**Composition:**

| Mn x $10^3$ | Mw/Mn |
|---|---|
| 11.5 | 5.9 |

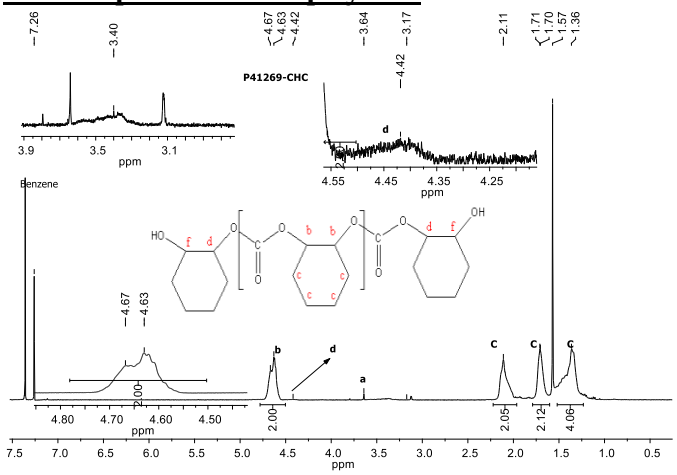
| | |
|---|---|
| Glass transition temperature | $T_g$ = 104 °C |
| Decomposition temperature (5% wt loss): | $T_{on}$ = 256 °C |

**Characterization:**

The product was characterized by size exclusion chromatography (SEC) using THF as an eluant, And by HNMR in CdCl3

Thermal analysis was performed on TA Instruments TGA-550 Discovery (TGA) and Q100 differential scanning calorimeter (DSC). TGA: The degradation temperature was measured at a scan rate of 10°C/min under a nitrogen atmosphere. DSC: The glass transition temperature ($T_g$) of the polymer was measured at a scan rate of 10°C/min shortly after creating thermal history of the sample.

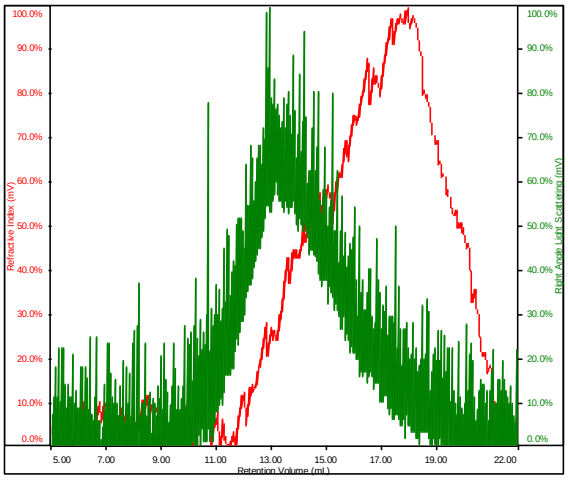
**HNMR spectrum of the polymer:**




**SEC elugram of the Sample:**

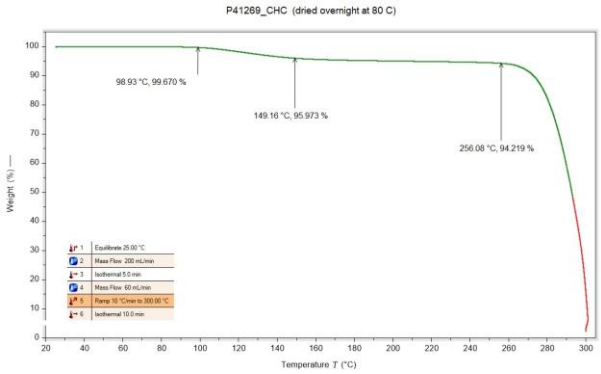
P41269-CHO

| | |
|---|---|
| Conc | 0.3920 |
| dn/dc | 0.1650 |
| Solvent | DMF w 0.023M LiBr |
| Flow Rate | 0.7000 |
| Method | PS99k_2018-05-30-0000.vcm |




| Sample | Mn | Mw | Mp | Mw/Mn | IV |
|---|---|---|---|---|---|
| P41269-CHO_01(86).vdt | 11,618 | 68,760 | 9,900 | 5.918 | 4.0763 |

**TGA thermogram of the polymer:**




**DSC thermogram (2nd heating scan):**