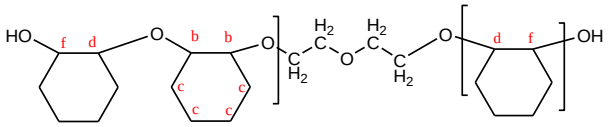
Sample Name: **α,ω–dihydroxy-terminated poly(cyclohexene oxide)**

Sample #: **P41278-CHO**

Structure:



Composition:

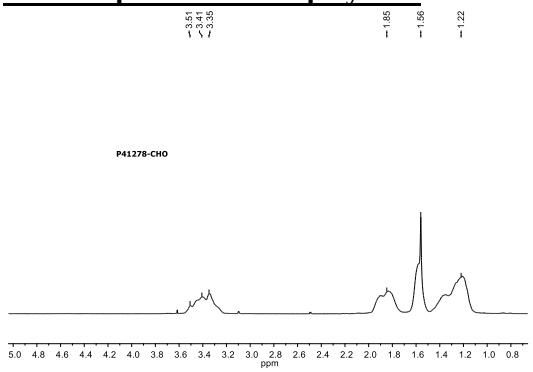
Mn x 10^3	Mw/Mn
18.0	1.4
Glass transition temperature:	T_g = 41 °C
Onset of decomposition (5% wt loss):	T_{on} ≈ 145 °C

Characterization:

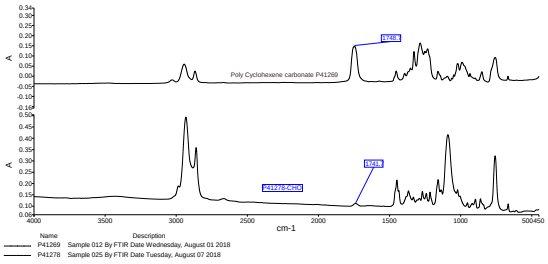
The product was characterized by size exclusion chromatography (SEC) using THF as an eluent, and by proton NMR in chloroform-d.

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 5°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:

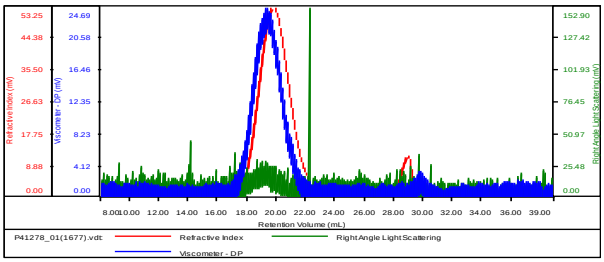


FTIR of the polymer:



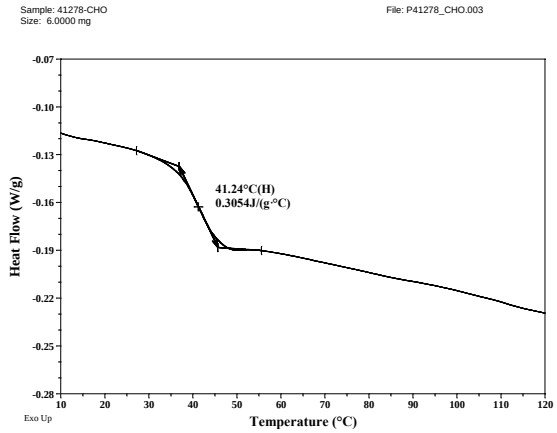
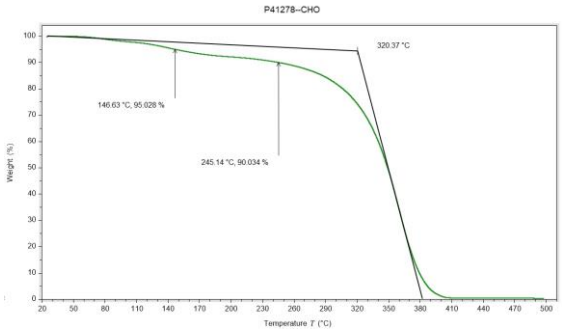
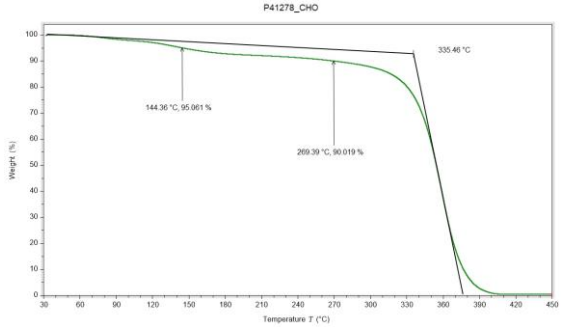
SEC elugram of the sample:

Concentration (mg/mL)	4.2428
Sample dn/dc (mL/g)	0.1850
Method File	PS100K-August-2018-2019.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P41278_01(1677).v	17,712	25,694	1.451	0.4543	17,134

DSC thermogram of the polymer:



TGA thermograms of the polymer: