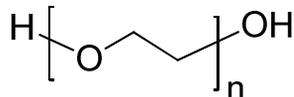


Sample name: Poly(ethylene glycol)

Other names: Poly(ethylene oxide), PEG, PEO

Sample # I-0010-PEG

Structure:



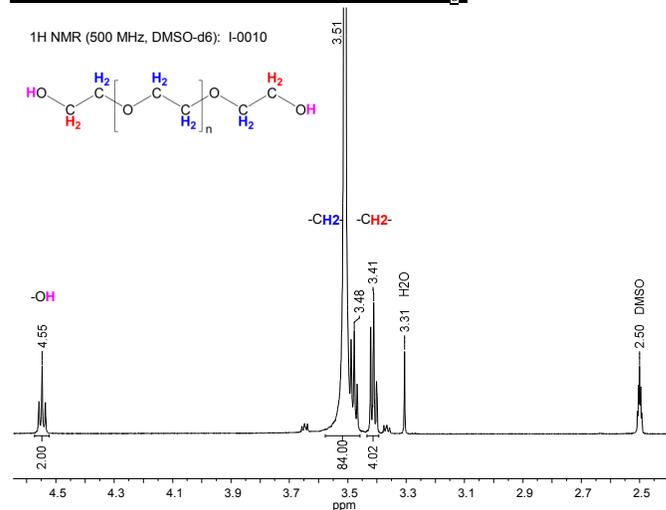
Molecular weight, $M_n \times 10^3$ (g/mol):	1.0
CAS number:	25322-68-3
Appearance:	wax-like
Colour:	white
Melting point, T_m :	41 °C

Characterization methods:

The molecular weight of the polymer was calculated from 1H NMR data recorded on Bruker Avance III 500 NMR spectrometer. Dimethyl sulfoxide- d_6 was used as a solvent.

Thermal analysis was performed on TA Instruments Q100 differential scanning calorimeter (DSC) under a nitrogen atmosphere. The melting point (T_m) of the polymer was measured at a scan rate of 10°C/min shortly after creating thermal history of the sample.

1H NMR spectrum of PEG in DMSO- d_6 :



DSC thermogram: 2nd cooling scan (top, 10°C/min) and 2nd heating scan (bottom, 10°C/min)

