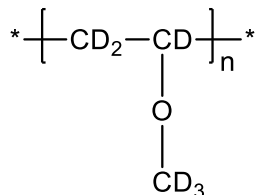


Sample Name:

**Deuterated poly(methyl vinyl ether)-d6**

Sample #: **P42148-d6MVE**

**Structure:**



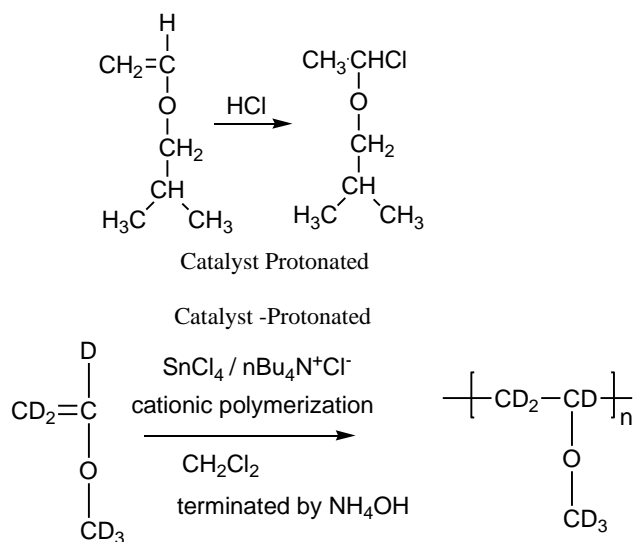
**Composition:**

$M_n \times 10^3$ (g/mol)	$M_w/M_n$
6.5	1.12

Glass transition temperature (T <sub>g</sub> ):	-30 °C
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**Synthesis procedure:**

Deuterated [d6] poly (methyl vinyl ether) was obtained by living cationic polymerization. The reaction scheme is shown below:



**Characterization:**

The molecular weight and polydispersity index ( $M_w/M_n$ ) of poly (methyl vinyl ether)-d6 were obtained by size exclusion chromatography (SEC).

Thermal analysis was performed on TA Instruments Q100 differential scanning calorimeter (DSC) under a nitrogen atmosphere. The glass transition temperature (T<sub>g</sub>) of the polymer was measured at a scan rate of 10°C/min shortly after creating thermal history of the sample.

**Solubility:**

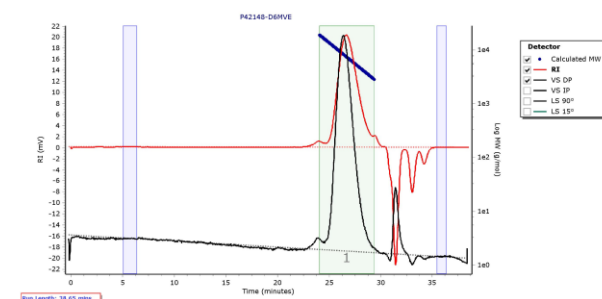
Deuterated poly (methyl vinyl ether) is soluble in Acetone and Methanol.

**SEC elugram of the Sample:**

Agilent GPC/SEC Software

P42148-D6MVE

Chromatogram Plot



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
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Peak 1	7476	6474	7241	8056	8937	7796	1.119
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**DSC thermogram (2<sup>nd</sup> heating scan, 10°C/min):**

