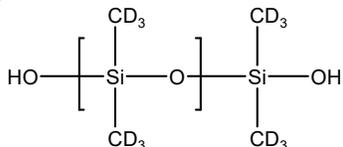


Sample Name:

**Deuterated Poly (dimethylsiloxane-d6) ,  $\alpha,\omega$ -bis(silanol)-terminated**

Sample #: **P43500F-dPDMS**

Structure:



Composition:

Mn x 10 <sup>3</sup>	Mw x 10 <sup>3</sup>	PDI
22.5	60.0	2.65

Synthesis Procedure:

The polymerization of the Deuterated Polydimethyl siloxane; Disilanol terminated was initiated with CF<sub>3</sub>SO<sub>3</sub>H Cationic polymerization process.

Characterization:

The product was characterized by size exclusion chromatography (SEC), D NMR and H NMR.

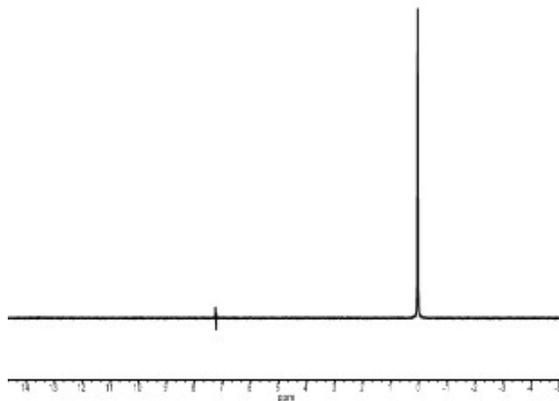
The following table is a listing of the conditions used for SEC analysis:

Parameter	Condition Used
Dissolution Solvent	Toluene
Sample Concentration	20 to 40 mg/mL
Filtration	0.2 $\mu\text{m}$ Nylon syringe filter
Mobile Solvent	Toluene
Columns	2 X Malvern T3000
Flow Rate	1.0 mL/min
System Back Pressure	800 psi
Injection Volume	100 $\mu\text{L}$
Column Temperature	30°C
Detector Temperature	30°C

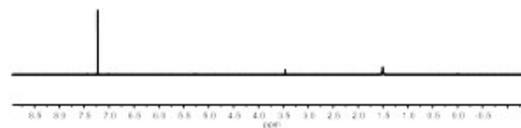
Solubility:

Deuterated Polydimethyl siloxane is soluble in hexane, toluene, cyclohexane, THF and chloroform. It precipitates from methanol and ethanol.

**D NMR spectrum of the Sample:**

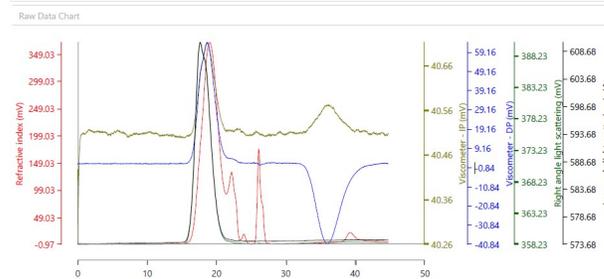


**H NMR spectrum of the Sample:**



**SEC elugram of the Sample:**

GPC analysis report



Injection Name Mn (g/mol) Mw (g/mol) Mp (g/mol) Mw/Mn  
P42500F, Injection 1, Peak 1 22.659 60.164 37.981 2.655