

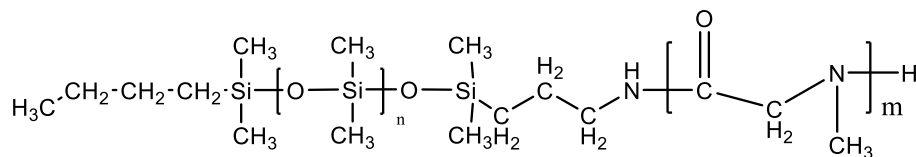
# Product Profile

## Identification

**Product Name:** Poly(dimethyl siloxane)-b-poly(Sarcosine) (Glycine N-Carboxyanhydrides)

**Product Lot Number:** P44684A-DMSSarcosine

**Product Chemical Architecture:**

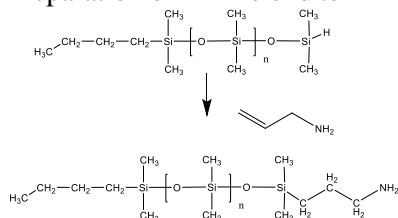


**Composition:**

Mn x 10 <sup>3</sup> DMS-b-Sarcosine	Mw/Mn (PDI)	Dp of each block: ( <sup>1</sup> H NMR)
2.0-b-0.25	1.18	DMS <sub>27</sub> -b-Sarcosine <sub>4</sub>

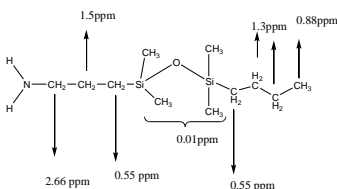
**Method of Synthesis:** 2 steps synthesis

1. Preparation of Amino end terminated PDMS as:

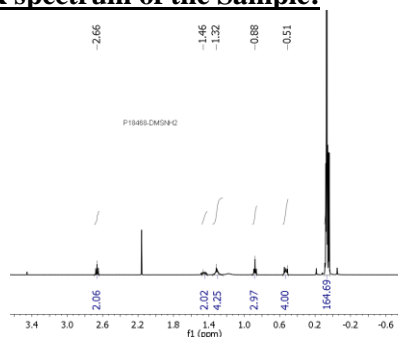


2. Reaction of NC-Sarcosine with Amino end terminated PDMS at room temperature  
HNMR of the Polymer Mn of 2000 (lot# P18468-DMS NH2)

**Chemical Shifts:**



**HNMR spectrum of the Sample:**



**Solubility in different solvents**

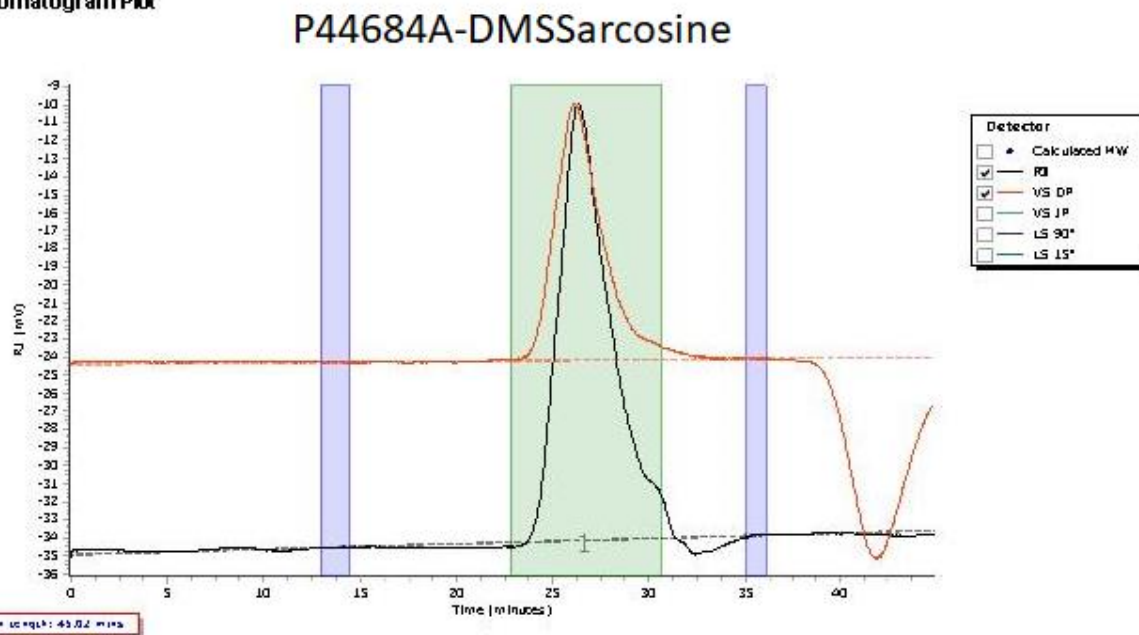
THF	✓		
CHCl <sub>3</sub>	✓		
Toluene-Hot	✓		

**Purification of Polymer:** to remove unreacted PDMS

## Validation of Architecture:

### A. Gel Permeation Chromatography (GPC), SEC- Profile

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
Peak 1	3095	2380	2821	3226	3585	3118	1.185

Processing Parameters

### B. NMR (HNMR) of polymer:

