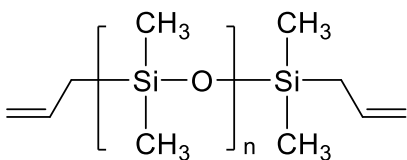


Product name:

**Poly(dimethylsiloxane),  $\alpha,\omega$ -bis(allyl)-terminated**

Product # **P5022-DMS2Allyl**

**Structure:**

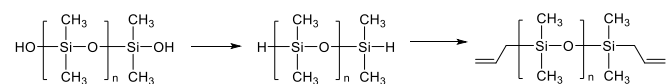


**Composition:**

$M_n \times 10^3$ (g/mol)	$M_w/M_n$
3.6	1.33

**Synthesis procedure:**

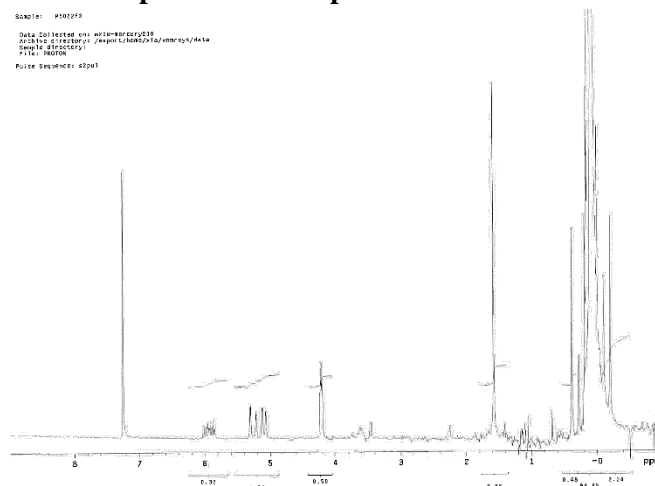
Allyl functionality was introduced by successive silanation of silanol-terminated PDMS by chlorodimethylsilane, followed by reaction with allyl alcohol in presence of catalyst. The scheme of reaction is presented below:



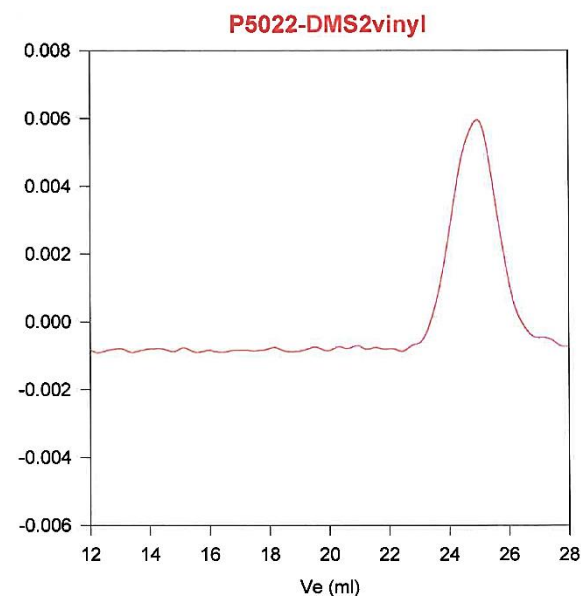
**Characterization:**

The molecular weight and polydispersity index of the product were determined by size exclusion chromatography (SEC). The functionalization of PDMS was confirmed by  $^1\text{H}$  NMR spectroscopy.

**$^1\text{H}$  NMR spectrum of the product in chloroform-d:**



**SEC of the polymer in THF:**



Size exclusion chromatography of  $\alpha,\omega$ -diallyl terminated polydimethylsiloxane:

$M_n=3,600$ ,  $M_w=4,800$ ,  $PI=1.33$