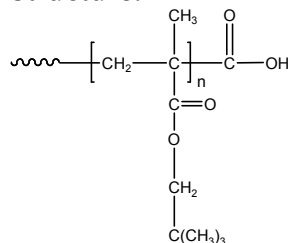
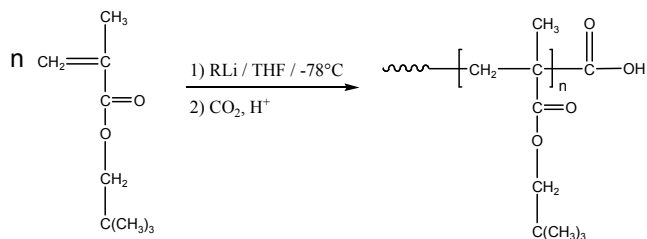


**Sample Name:****Carboxy Terminated Poly(neopentyl methacrylate)****Sample #: P3646-NPMACOOH****Structure:****Composition:**

|                         |       |
|-------------------------|-------|
| $M_n \times 10^3$       | PDI   |
| 21.7                    | 1.05  |
| Degree of functionality | >95%  |
| $T_g$ for the polymer   | 118°C |

**Synthesis Procedure:**

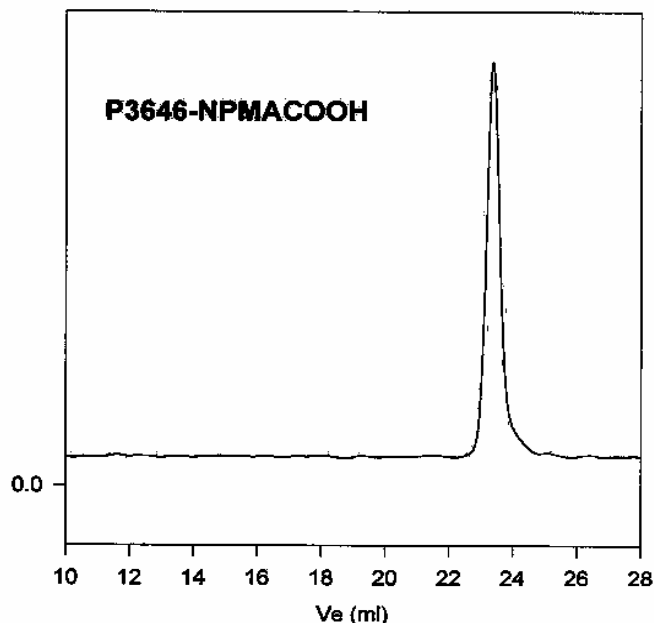
Carboxy Terminated Poly(neopentyl methacrylate) was prepared by anionic living polymerization of neopentyl methacrylate in THF and termination of the polymerization with dried  $\text{CO}_2$ . The scheme of the reaction is illustrated below:

**Characterization:**

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector before the addition of the  $\text{CO}_2\text{H}$  function.

**Solubility:**

The polymer is soluble in  $\text{CHCl}_3$ , THF and dioxane.

**SEC of Sample:**

Size exclusion chromatography of carboxy terminated poly(neopentyl methacrylate) (before termination with  $\text{CO}_2$ )

$M_n=21700$ ,  $M_w=22800$ ,  $PI=1.05$ , functionality>0.98%

**DSC thermogram for the sample:**