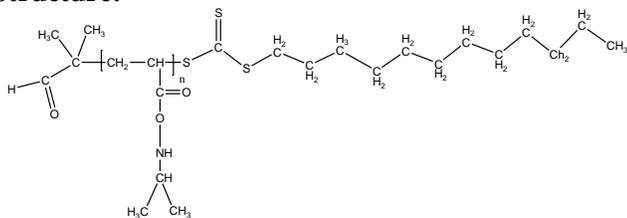


**Sample Name:**  $\alpha$ -carboxy-terminated Poly(N-isopropyl acrylamide)

**Sample #:** P10480CF2-NIPAMCOOH

**Structure:**



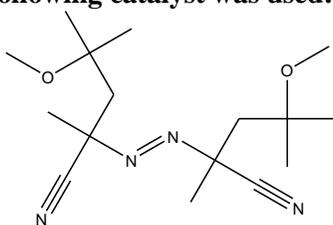
**Composition:**

$M_n \times 10^3$	PDI
29.5	1.4

**Synthesis Procedure:**

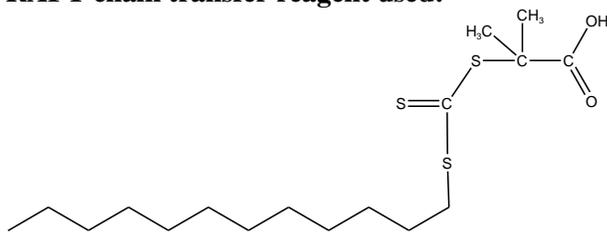
$\alpha$ -carboxy-terminated Poly (N-isopropyl acrylamide) is obtained by RAFT polymerization process.

**Following catalyst was used:**



2,2'-azobis (2,4-dimethyl-4-methoxyvaleronitrile)

**RAFT chain transfer reagent used:**



2-dodecylsulfonyl-2-methylpropionic acid

**Characterization:**

The molecular weight and polydispersity index (PDI) were obtained by size exclusion chromatography (SEC) in DMF equipped with refractive index, viscometer and light scattering detectors at 50 °C degree.

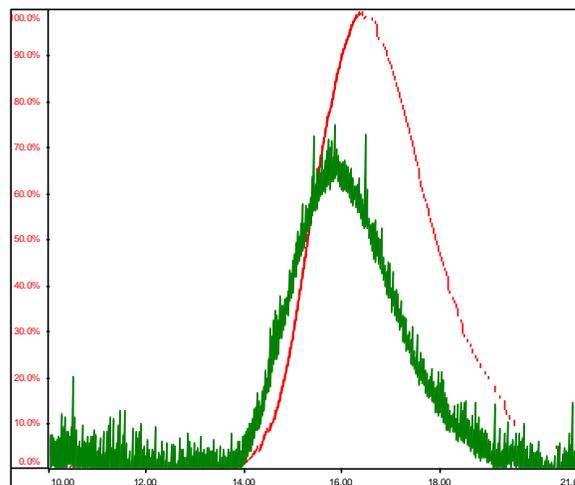
**Purification of polymer:**

Unreacted monomer was removed by dissolving the product in cold water than warming the solution. The polymer is separated out. This procedure was repeated 2 times to remove the unreacted monomer. The obtained polymer was dissolved in acetone and precipitated from hexane.

**SEC of the Polymer in DMF:**

P10480C-F2

Conc	3.4182
dn/dc	0.0770
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS99K_2018-05-30-0000.vcm



Sample	$M_n$	$M_w$	$M_p$	$M_w/M_n$	IV
P10480C-F2_01.vdt	29,416	40,855	35,054	1.389	0.5430