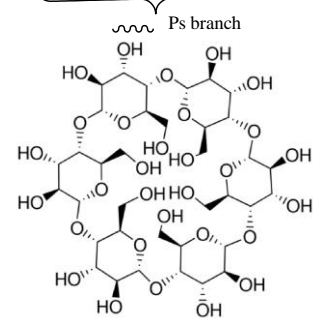
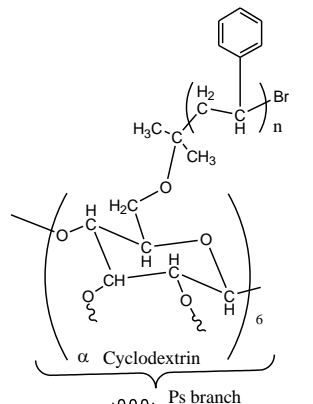


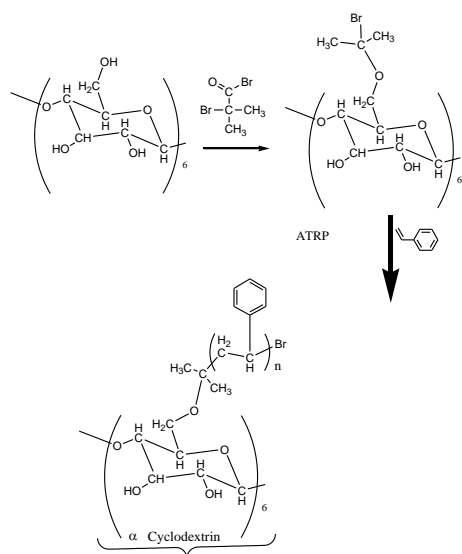
**Sample Name: P20147-**  
**Star like Polystyrene bearing  $\alpha$ -Cyclodextrin**  
**as core:**  
**Number of arms: 17 arms**



**Cyclodextrin**

Mn x 10 <sup>3</sup> (total)	PDI
1,515.0	1.28
Branch molecular weight 88.0	1.3

**Synthesis Procedure:**  
 By ATRP Process:



**Scheme 1.**

### Characterization:

**Molecular Weight:** Size exclusion chromatography (SEC): The absolute molecular weight of the star-like polymer was determined by light scattering detector-Viscotek 270 model.

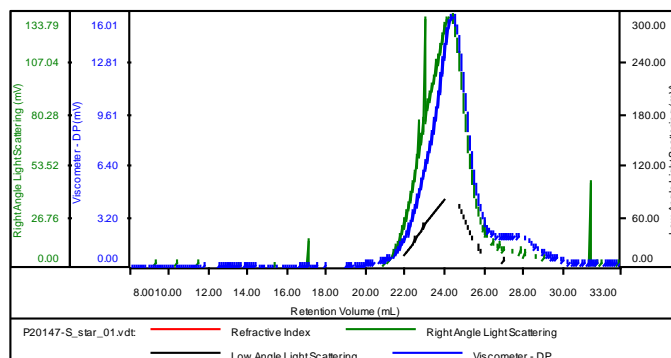
To analyze the molecular weight of the arms consisting of polystyrene, the ester groups located between cyclodextrin and PS block were cut by hydrolysis in the basic condition.

### SEC of the Polymer:

After Hydrolysis of star: Mn of Branch: 88,000

### Sample ID: P20147- S-Star

Concentration (mg/mL)	0.6480
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-NOV-2014-0003.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P20147-S_star_01.vdt	1.515 e 6	1.948 e 6	1.396 e 6	1.286	1.3930