



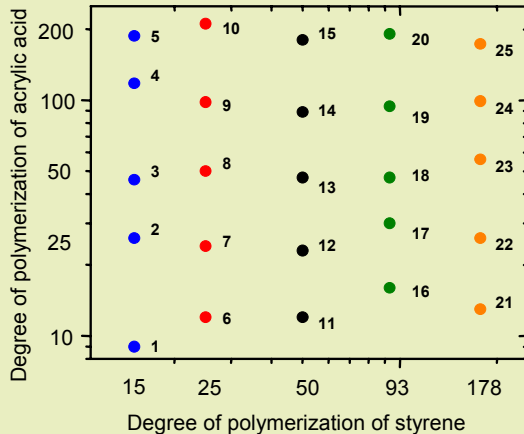
ATRP
solutions





L-1971 Polystyrene-*b*-Poly(Acrylic Acid) Systematic Library

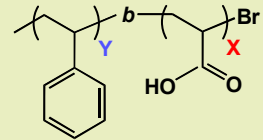
SAMPLE MAP



QA/QC:

Date: 07/23/08

Sample Name: PSt_Y-*b*-PAA_X



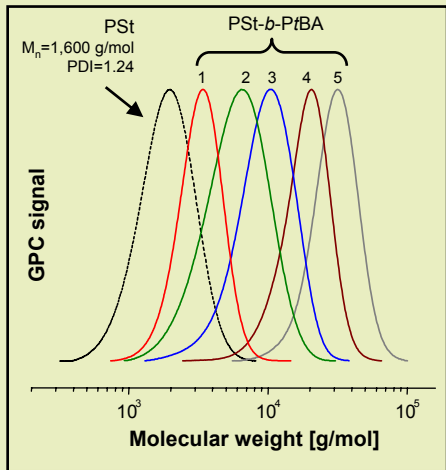
Degree of Polymerizations:

For PSt $Y = 15, 25, 50, 93, 178$ (constant for each copolymer)

For PAA $X \approx 10, 25, 50, 100, 200$

L-1971 Polystyrene-*b*-Poly(Acrylic Acid) Systematic Library

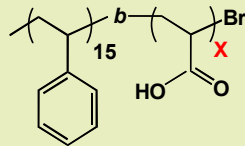
SAMPLES: 1-5



QA/QC:

Date: 07/23/08

Sample Name: PSt₁₅-*b*-PAA_X



Results:

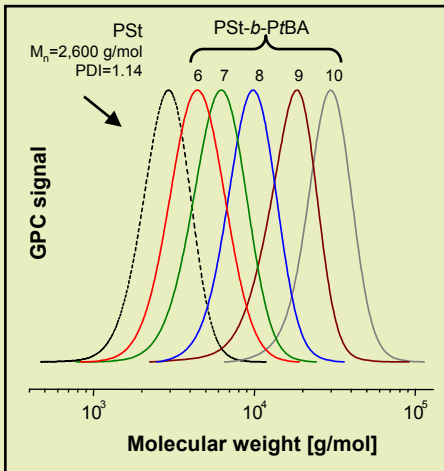
$M_{n\text{PSt}} = 1,600$ g/mol, $\text{PDI}_{\text{PSt}} = 1.24$, $\text{DP}_{\text{PSt}} = 15$ (GPC)

- | | |
|---|------------------|
| (1) $M_n = 2,200$ g/mol, PDI = 1.14, X = 9 | (LOT# 08-006-39) |
| (2) $M_n = 3,500$ g/mol, PDI = 1.27, X = 26 | (LOT# 08-006-38) |
| (3) $M_n = 4,900$ g/mol, PDI = 1.17, X = 46 | (LOT# 08-006-37) |
| (4) $M_n = 10,100$ g/mol, PDI = 1.17, X = 118 | (LOT# 08-006-36) |
| (5) $M_n = 15,100$ g/mol, PDI = 1.15, X = 187 | (LOT# 07-006-35) |



L-1971 Polystyrene-*b*-Poly(Acrylic Acid) Systematic Library

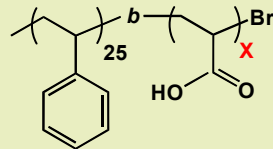
SAMPLES: 6-10



QA/QC:

Date: 07/23/08

Sample Name: PSt₂₅-*b*-PAA_x



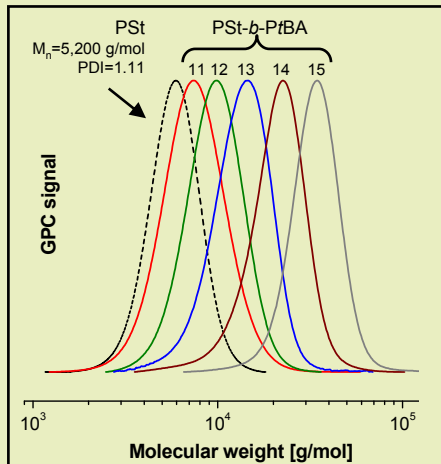
Results:

$M_{n\text{PSt}} = 2,600$ g/mol, $\text{PDI}_{\text{PSt}} = 1.14$, $\text{DP}_{\text{PSt}} = 25$ (GPC)

- | | |
|---|------------------|
| (6) $M_n = 3,500$ g/mol, PDI = 1.17, X = 12 | (LOT# 08-006-23) |
| (7) $M_n = 4,300$ g/mol, PDI = 1.16, X = 24 | (LOT# 08-006-22) |
| (8) $M_n = 6,200$ g/mol, PDI = 1.17, X = 50 | (LOT# 08-006-21) |
| (9) $M_n = 9,700$ g/mol, PDI = 1.16, X = 98 | (LOT# 08-006-20) |
| (10) $M_n = 17,800$ g/mol, PDI = 1.12, X = 211 | (LOT# 08-006-19) |

L-1971 Polystyrene-*b*-Poly(Acrylic Acid) Systematic Library

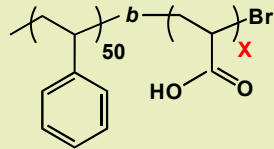
SAMPLES: 11-15



QA/QC:

Date: 07/23/08

Sample Name: PSt₅₀-*b*-PAA_x



Results:

$M_{n\text{PSt}} = 5,200$ g/mol, $\text{PDI}_{\text{PSt}} = 1.11$, $\text{DP}_{\text{PSt}} = 50$ (GPC)

(11) $M_n = 6,100$ g/mol, PDI = 1.16, **X = 12** (LOT# 08-006-02)

(12) $M_n = 6,900$ g/mol, PDI = 1.13, **X = 23** (LOT# 08-006-01)

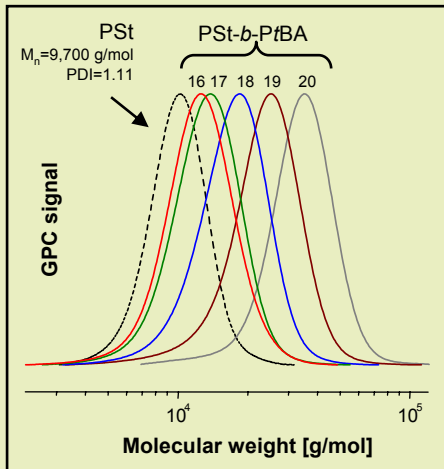
(13) $M_n = 8,600$ g/mol, PDI = 1.14, **X = 47** (LOT# 07-004-99)

(14) $M_n = 11,600$ g/mol, PDI = 1.15, **X = 89** (LOT# 07-004-98)

(15) $M_n = 18,200$ g/mol, PDI = 1.12, **X = 180** (LOT# 07-004-97)

L-1971 Polystyrene-*b*-Poly(Acrylic Acid) Systematic Library

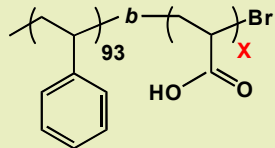
SAMPLES: 16-20



QA/QC:

Date: 07/23/08

Sample Name: PSt₉₃-*b*-PAA_x



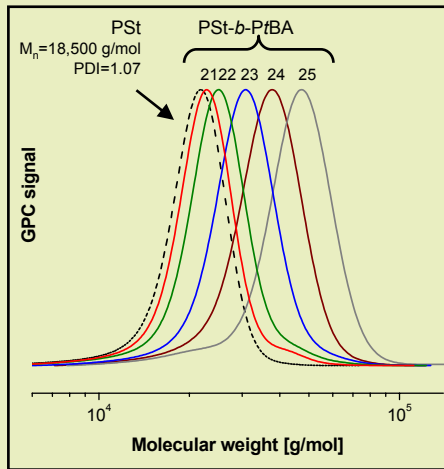
Results:

$M_{n\text{PSt}} = 9,700$ g/mol, $\text{PDI}_{\text{PSt}} = 1.11$, $\text{DP}_{\text{PSt}} = 93$ (GPC)

(16) $M_n = 10,900$ g/mol, PDI = 1.14, X = 16	(LOT# 08-006-14)
(17) $M_n = 11,900$ g/mol, PDI = 1.13, X = 30	(LOT# 08-006-13)
(18) $M_n = 13,100$ g/mol, PDI = 1.14, X = 47	(LOT# 07-004-12)
(19) $M_n = 16,500$ g/mol, PDI = 1.16, X = 94	(LOT# 07-004-11)
(20) $M_n = 23,500$ g/mol, PDI = 1.11, X = 191	(LOT# 07-004-10)

L-1971 Polystyrene-*b*-Poly(Acrylic Acid) Systematic Library

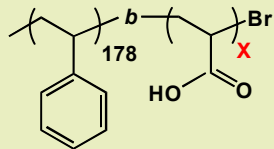
SAMPLES: 21-25



QA/QC:

Date: 07/23/08

Sample Name: PSt₁₇₈-*b*-PAA_X



Results:

$M_{n\text{PSt}} = 18,500$ g/mol, $\text{PDI}_{\text{PSt}} = 1.07$, $\text{DP}_{\text{PSt}} = 178$ (GPC)

- | | |
|---|------------------|
| (21) $M_n = 19,400$ g/mol, PDI = 1.09, X = 13 | (LOT# 07-004-51) |
| (22) $M_n = 20,400$ g/mol, PDI = 1.11, X = 26 | (LOT# 07-004-50) |
| (23) $M_n = 22,500$ g/mol, PDI = 1.09, X = 56 | (LOT# 07-004-49) |
| (24) $M_n = 25,600$ g/mol, PDI = 1.09, X = 99 | (LOT# 07-004-44) |
| (25) $M_n = 31,000$ g/mol, PDI = 1.09, X = 173 | (LOT# 07-004-48) |



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