Calibration Standards for SEC

Polystyrene (PS)

Features

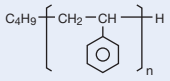
SL-105
SM-105
SH-75

- For organic solvent SEC (GPC)
- Less branched polystyrene with anionic polymerization
- Easily soluble in tetrahydrofuran (THF), chloroform, toluene, and o-dichlorobenzene (ODCB)

Standard kit

Product Code	Product Name	Contents	Molecular Weights (Mp) Range
F8601105	**STANDARD SL-105**	**0.5 g x 10 kinds**	580 - 22,800
F8602105	**STANDARD SM-105**	**0.5 g x 10 kinds**	1,210 - 2,330,000
F8603075	**STANDARD SH-75**	**0.5 g x 7 kinds**	662,000 - 6,550,000

Structural formula of S series



◆ **SL-105**

Std.No.	Mp	Mw/Mn
S-23	22,800	1.02
S-13	13,000	1.02
S-10	10,300	1.03
S-6.5	6,540	1.03
S-4.9	4,880	1.03
S-2.9	2,880	1.04
S-2.0	1,990	1.05
S-1.2	1,210	1.07
S-1.1	1,120	1.07
S-0.6	580	1.11

◆ **SM-105**

Std.No.	Mp	Mw/Mn
S-2330	2,330,000	1.03
S-1700	1,700,000	1.04
S-740	740,000	1.06
S-321	321,000	1.03
S-129	129,000	1.06
S-57	56,600	1.03
S-23	22,800	1.02
S-6.5	6,540	1.03
S-2.9	2,880	1.04
S-1.2	1,210	1.07

◆ **SH-75**

Std.No.	Mp	Mw/Mn
S-6550	6,550,000	1.07
S-3550	3,550,000	1.05
S-3020	3,020,000	1.03
S-2330	2,330,000	1.03
S-1860	1,860,000	1.04
S-885	885,000	1.05
S-662	662,000	1.04

(Note)
Molecular weights (Mp, Mw/Mn) of each standard kit may vary depending on production lot.

Polymethylmethacrylate (PMMA)

Features

M-75

- For organic solvent SEC (GPC)
- Narrow molecular weight distribution range
- Easily soluble in hexafluoroisopropanol (HFIP) and dimethylformamide (DMF)

Standard kit

Product Code	Product Name	Contents	Molecular Weights (Mp) Range
F8604075	**STANDARD M-75**	**0.5 g x 7 kinds**	3,040 - 1,020,000

(Note)
Molecular weights (Mp, Mw/Mn) of a standard kit may vary depending on production lot.

◆ **M-75**

Std.No.	Mp	Mw/Mn
M-1020	1,020,000	1.04
M-539	539,000	1.02
M-224	224,000	1.02
M-72	72,000	1.02
M-20	20,100	1.03
M-7.3	7,290	1.11
M-3.0	3,040	1.08

Pullulan

Features

P-82
P

- For aqueous SEC (GFC)
- Unbranched pullulan standard
- High solubility in water eliminates the possibility of recrystallization

Standard kit

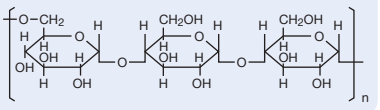
Product Code	Product Name	Contents	Molecular Weights (Mp) Range
F8400000	**STANDARD P-82**	**0.2 g x 8 kinds**	6,300 - 739,000

Single type

Product Code	Product Name	Contents	Mp	Mw/Mn
F8400800	**STD P-800**	**0.5 g**	739,000	1.24
F8400400	**STD P-400**	**0.5 g**	334,000	1.30
F8400200	**STD P-200**	**0.5 g**	216,000	1.22
F8400100	**STD P-100**	**0.5 g**	107,000	1.12
F8400050	**STD P-50**	**0.5 g**	49,700	1.09
F8400020	**STD P-20**	**0.5 g**	22,000	1.08
F8400010	**STD P-10**	**0.5 g**	9,800	1.07
F8400005	**STD P-5**	**0.5 g**	6,300	1.09

(Note)
Molecular weights (Mp, Mw/Mn) of a standard kit or each single type may vary depending on production lot.

Structural formula of P series



◆ **P-82**

Std.No.	Mp	Mw/Mn
P-800	739,000	1.24
P-400	334,000	1.30
P-200	216,000	1.22
P-100	107,000	1.12
P-50	49,700	1.09
P-20	22,000	1.08
P-10	9,800	1.07
P-5	6,300	1.09