

Calibration Standards for SEC

Polystyrene (PS)

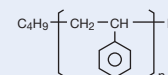
Features

- SL-105**
 - For organic solvent SEC (GPC)
- SM-105**
 - Less branched polystyrene with anionic polymerization
- SH-75**
 - 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**
 - 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

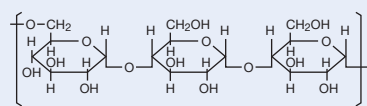
(Single type)*

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

*end of sale: 31.12.2022

(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