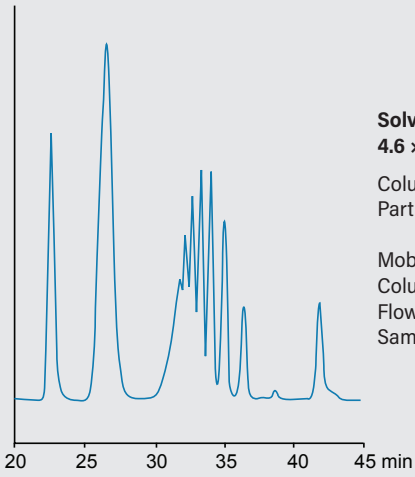


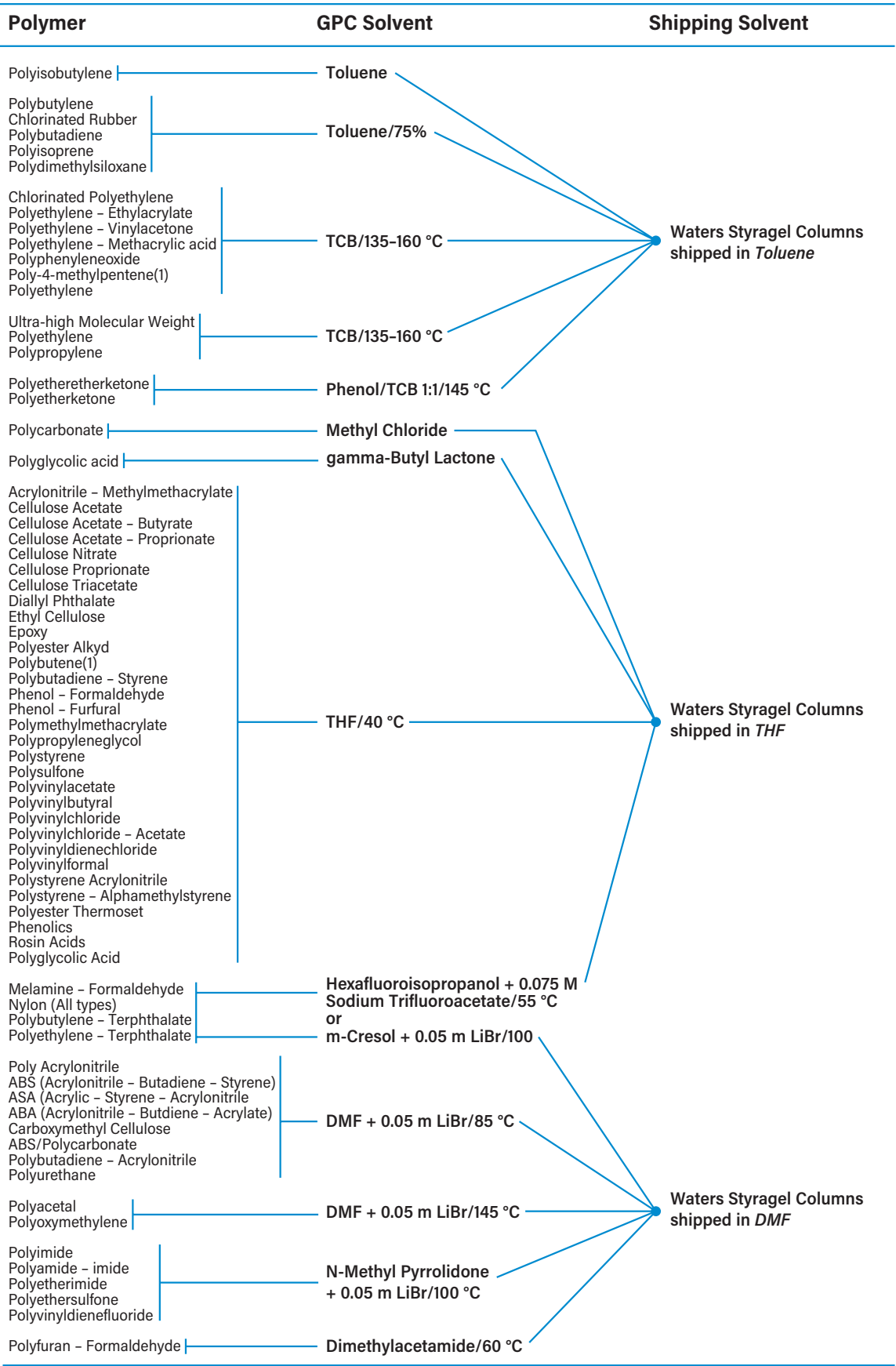
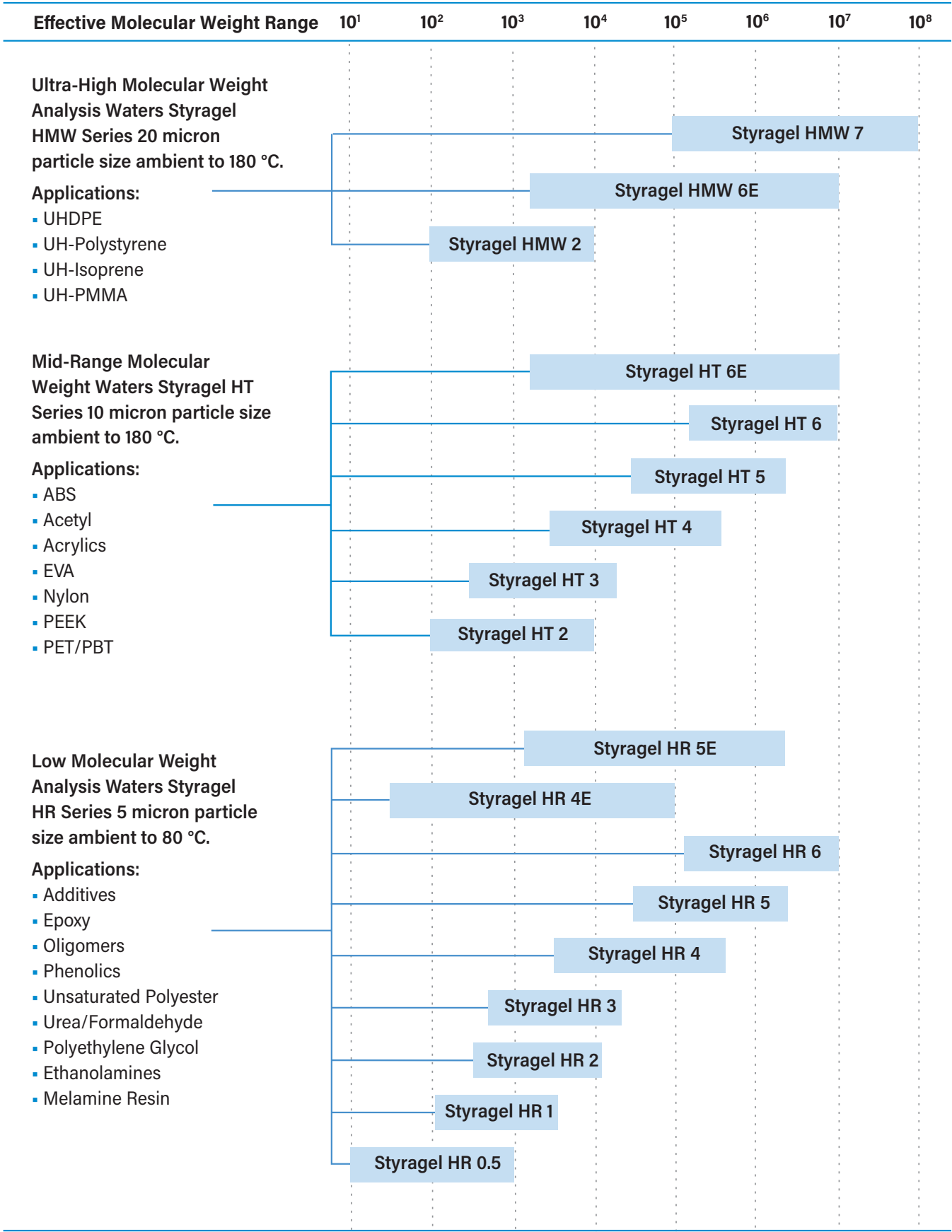
Waters Styragel GPC Column Selection Wall Chart

Waters™ Styragel Family of GPC Columns is intended for use in polymer separations. Stryragel HR (high-resolution) columns are ideal for analyzing oligomers, epoxies, and polymer additives. Packed with rigid 5µm particles, these columns deliver unrivaled separation efficiency in the low-to-mid molecular-weight region. The Styragel HT (high-temperature) columns are tightly packed with 10 µm particles and suitable for both ambient and high-temperature analysis of mid-to-high molecular-weight range. The Styragel HT Columns can be used with more aggressive solvents. Waters Styragel HMW columns are long-life columns packed with 20 µm particles (suitable for use at both ambient and elevated temperatures) are designed to analyze polymers of ultra-high-molecular-weight that are susceptible to sheering.

Waters Ultrastyrigel Preparative Columns provide high-efficiency GPC separations for isolation and sample cleanup. Separations that would have required multiple smaller columns can now be performed on a single, more efficient preparative column. The Envirogel High-efficiency GPC Clean-up Columns remove low volatility, high-molecular-weight interferences, such as lipids and natural resins, from environmental samples (as specified in EPA Method 3640A).



Solvent-Efficient Styragel HR Columns, 4.6 x 300 mm
Column bank: Styragel HR 0.5, 1, 2, and 3
Part numbers: WAT045835, WAT045850, WAT045865, WAT045880
Mobile phase: THF
Column temp.: 35 °C
Flow rate: 0.35 mL/min
Sample: Polystyrene standard mix 0.5 K, 5.05 K, 49.8 K



Ordering Information

Solvent Efficient Styragel Columns (4.6 mm I.D. x 300 mm)				
Column	Effective Molecular Weight Range	Part No.	Part No.	Part No.
		THF	DMF	Toluene
Styragel HR Columns				
Styragel HR 0.5	0–1,000	WAT045835	WAT045840	WAT045830
Styragel HR 1	100–5,000	WAT045850	WAT045855	WAT045845
Styragel HR 2	500–20,000	WAT045865	WAT045870	WAT045860
Styragel HR 3	500–30,000	WAT045880	WAT045885	WAT045875
Styragel HR 4	5,000–600,000	WAT045895	WAT045900	WAT045890
Styragel HR 4E	50–100,000	WAT045805	WAT045810	WAT045800
Styragel HR 5	50,000–4 x 10 ⁶	WAT045820	WAT045825	WAT045815
Styragel HT Columns				
Styragel HR 3	500–30,000	WAT045920	WAT045925	WAT045915
Styragel HR 4	5,000–600,000	WAT045935	WAT045940	WAT045930
Styragel HR 5	50,000–4 x 10 ⁶	WAT045950	WAT045955	WAT045945
Styragel HR 6	200,000–1 x 10 ⁷	WAT045965	WAT045970	WAT045960
Styragel HR 6E	5,000 – 1 x 10 ⁷	WAT045980	WAT045985	WAT045975
Styragel HMW Columns				
Styragel HMW 7	500,000–1 x 10 ⁸	WAT046805	WAT046810	WAT046800
Styragel HMW 6E	5,000–1 x 10 ⁷	WAT046820	WAT046825	WAT046815

Styragel Columns (7.8 mm I.D. x 300 mm)				
Column	Effective Molecular Weight Range	Part No.	Part No.	Part No.
		THF	DMF	Toluene
Styragel HR Columns				
Styragel HR 0.5	0–1,000	WAT044231	WAT044232	WAT044230
Styragel HR 1	100–5,000	WAT044234	WAT044235	WAT044233
Styragel HR 2	500–20,000	WAT044237	WAT044238	WAT044236
Styragel HR 3	500–30,000	WAT044222	WAT044223	WAT044221
Styragel HR 4	5,000–600,000	WAT044225	WAT044226	WAT044224
Styragel HR 4E	50–100,000	WAT044240	WAT044241	WAT044239
Styragel HR 5	50,000–4 x 10 ⁶	WAT054460	WAT054466	WAT054464
Styragel HR 5E	2,000–4 x 10 ⁶	WAT044228	WAT044229	WAT044227
Styragel HR 6	200,000–1 x 10 ⁷	WAT054468	WAT054474	WAT054470
Styragel HT Columns				
Styragel HR 2	100–10,000	WAT054475	WAT054480	WAT054476
Styragel HR 3	500–30,000	WAT044207	WAT044208	WAT044206
Styragel HR 4	5,000–600,000	WAT044210	WAT044211	WAT044209
Styragel HR 5	50,000–4 x 10 ⁶	WAT044213	WAT044214	WAT044212
Styragel HR 6	200,000–1 x 10 ⁷	WAT044216	WAT044217	WAT044215
Styragel HR 6E	5,000 – 1 x 10 ⁷	WAT044219	WAT044220	WAT044218
Styragel HMW Columns				
Styragel HMW 2	100–10,000	WAT054488	WAT054494	WAT054490
Styragel HMW 7	500,000–1 x 10 ⁸	WAT044201	WAT044202	WAT044200
Styragel HMW 6E	5,000–1 x 10 ⁷	WAT044204	WAT044205	WAT044203
Styragel Guard Column				
	–	WAT054405	WAT054415	WAT054410
Ultrastyrigel Columns (prep)				
Ultrastyrigel 100 Å	50–1500	WAT010570	–	WAT085500
Ultrastyrigel 500 Å	100–10,000	WAT010571	–	WAT085501

Ultrastyrigel Columns (Prep; 19 mm I.D. x 300 mm)				
Column	Effective Molecular Weight Range	Part No.	Part No.	Part No.
		THF	DMF	Toluene
Ultrastyrigel 100 Å	50–1500	WAT025859	–	WAT025866
Ultrastyrigel 500 Å	100–10,000	WAT025860	–	WAT025867
Ultrastyrigel 10 ³ Å	200–30,000	WAT025861	–	WAT025868
Ultrastyrigel 10 ⁴ Å	5000–600,000	WAT025862	–	WAT025869
Ultrastyrigel 10 ⁵ Å	50,000–4 M	WAT025863	–	WAT025870
Ultrastyrigel 10 ⁶ Å	200,000–10 M	WAT025864	–	WAT025871
Ultrastyrigel Linear	2000–4 M	WAT025865	–	WAT025872

Envirogel High-Resolution GPC Cleanup Columns				
Column	Dimension	Part No.	Part No.	
		Methylene Chloride	Cylcohexane/Ethyl Acetate	
Envirogel GPC Cleanup	19 x 150 mm	WAT036555	186001915	
Envirogel GPC Cleanup	19 x 300 mm	WAT036554	186001916	
Envirogel GPC Guard	4.6 x 30 mm	186001913	186001914	