

# Overview of GROM SIL phases

Overview of Stationary Phases

Stationary Phase	Particle Size $\mu\text{m}$										Pore Diameter $\text{\AA}$	Surface Area $\text{m}^2/\text{g}$	Pore Volume $\text{ml/g}$	% C	Recommended pH of Mobile Phase	Field of Applications	Abbreviation for the order number
	1.5	2	3	4	5	7	10	prep. material	sphere-cap.	polymeric bonding							
C18	GROM-SIL ... ODS-0 AB (acid/base deactivated)	x	x	x	x	x	x	x	x	x	100	200	0.5	11	2 - 8	fat-soluble Vitamins, ....	GS OD 0.....
	GROM-SIL ... ODS-1 PE (partially endcapped)		x	x	x	x	x	x	x	x	80, 100	220, 200	0.5, 0.5	7, 6	2 - 8	Drugs: Antibiotics, Anti- ....	GS OD 1.....
	GROM-SIL ... ODS-2 FE (fully endcapped)	x	x	x	x	x	x	x	x	x	80, 100, 300	220, 200, 100	0.5, 0.78, 1	12, 11, 6	2 - 8	histamines, Barbiturates	GS OD 2.....
	GROM-SIL ... ODS-3 CP (encapsulated)		x	x	x	x	x	x	x	x	120, 300	320, 170	0.8, 0.7	15, 6	1 - 10	etc. ..., Herbicides, Fungi- ....	GS OD 3.....
	GROM-SIL ... ODS-4 HE (hydrophilic endcapping)	x	x	x	x	x	x	x	x	x	120, 200	300, 200	1.0, 0.95	16, 11	2 - 8	cides, Bacteriocides, ....	GS OD 4.....
	GROM-SIL ... ODS-5 ST (standard)	x	x	x	x	x	x	x	x	x	60, 120, 200, 300	580, 300, 200, 150	1.1, 1.0, 0.95, 0.7	22, 17, 12, 7	2 - 8	Pesticides ..., Nucleotides, ....	GS OD 5.....
	GROM-SIL ... ODS-6 NE (non endcapped)	x	x								120	300	1.0	17	2 - 8	Catecholamines, ....	GS OD 6.....
	GROM-SIL ... ODS-7 pH (pH-stable)		x							x	80	510	1.0	22	1 - 10	Peptides, Proteins, ....	GS OD 7.....
	GROM Sapphire C18		x	x	x	x	x	x	x	x	65, 110	500, 270	0.9, 1.1	23, 16	1.5 - 9		GS OD S.....
	GROM Ruby C18	x						x	x	x	110	130	0.3	11	1.5 - 9		GS OD R.....
C8	GROM-SIL ... Octyl-1 B (base deactivated)	x	x			x	x	x	x	x	100	200	0.5	6.5	2 - 8	Peptides, Proteins, Nucleo- ....	GS OC 1.....
	GROM-SIL ... Octyl-2 AB (acid/base deactivated)	x	x			x	x	x	x	x	100	200	0.5	5	2 - 8	tides, basic compounds, ....	GS OC 2.....
	GROM-SIL ... Octyl-3 BA (for bases)	x	x			x	x	x	x	x	120	300	1.0	9	2 - 8	(Amines, etc.), Fatty acids	GS OC 3.....
	GROM-SIL ... Octyl-4 FE (fully endcapped)	x	x	x	x	x	x	x	x	x	80, 100, 300	220, 200, 100	0.5, 0.5, 0.78	6.6, 6, 3	2 - 8	(phenacyl derivatives), ....	GS OC 4.....
	GROM-SIL ... Octyl-5 CP (encapsulated)	x	x	x	x	x	x	x	x	x	120, 300	320, 170	0.8, 0.7	10, 5.5	1 - 10	Angiotensins, drugs .... ,	GS OC 5.....
	GROM-SIL ... Octyl-6 MB (monomer binding)	x	x	x	x	x	x	x	x	x	120, 200, 300	300, 200, 150	1, 0.95, 0.7	10, 7, 4	2 - 8	Antihistamines, ....	GS OC 6.....
	GROM Sapphire C8	x	x	x	x	x	x	x	x	x	65, 110	500, 270	0.9, 1.1	15, 10	1.5 - 9		GS OC S.....
	GROM Ruby C8	x				x	x	x	x	x	110	130	0.3	7	1.5 - 9		GS OC R.....
C6	GROM-SIL ... Hexyl-1 MB (monomeric bonding)		x	x	x	x	x	x	x	x	80, 100	220, 200	0.5, 0.5	4, 4	2 - 8	Vitamins, Bile acids, ....	GS HE 1.....
	GROM-SIL ... Phenyl-1 FE (fully endcapped)	x	x	x	x	x	x	x	x	x	120, 300	300, 150	1.0, 0.7	9, 5	2 - 8	Polyphenols, ....	GS PH 1.....
	GROM-SIL ... Phenyl-2 CP (encapsulated)		x			x	x	x	x	x	120, 300	320, 170	0.8, 0.7	7, 4	1.5 - 9		GS PH 2.....
	GROM-SIL ... Phenyl-3 PE (partially endcapped)	x	x	x	x	x	x	x	x	x	80, 100	220, 200	0.5, 0.5	6.6, 6	2 - 8		GS PH 3.....
C4	GROM-SIL ... Butyl-1 ST (standard)	x	x		x	x	x	x	x	x	120, 300	300, 150	1.0, 0.7	7, 2.5	2 - 8	Proteins, Catechins, ....	GS BU 1.....
	GROM-SIL ... Butyl-2 FE (fully endcapped)	x	x		x	x	x	x	x	x	300	100	1.0	1,5	2 - 8	Vitamins, ....	GS BU 2.....
	GROM Sapphire C4	x	x	x	x	x	x	x	x	x	65, 110	500, 270	0.9, 0.9	10.5, 7	1.5 - 9		GS BU S.....
C1	GROM-SIL ... TMS-1 ST (standard)	x	x		x	x	x	x	x	x	120, 300	300, 150	1.0, 0.7	4	2 - 8	SFC, $\text{H}_2\text{O}$ -sol. Vitamins, ....	GS TM 1.....
	GROM-SIL ... TMS-2 CP (encapsulated)	x	x		x	x	x	x	x	x	120, 300	320, 170	0.8, 0.7	3	1.5 - 8	Analgesics, ... Phenols, ....	GS TM 2.....
CN	GROM-SIL ... Cyan-1 ST (standard)	x	x		x	x	x	x	x	x	120, 300	300, 150	1.0, 0.7	4.8	2 - 8	Steroids, Antidepressives, ....	GS CN 1.....
	GROM-SIL ... Cyan-2 PR (cyanopropyl)	x	x		x	x	x	x	x	x	80, 100	220, 200	0.5, 0.5	3.5	2 - 8	Polyphenols, Alkaloids, ....	GS CN 2.....
	GROM-SIL ... Cyan-3 CP (encapsulated)	x	x		x	x	x	x	x	x	120	320	0.8	4	1.5 - 8	SFC, ....	GS CN 3.....
NH <sub>2</sub>	GROM-SIL ... Amino-1 PR (NH <sub>2</sub> -propyl)	x	x	x	x	x	x	x	x	x	80, 100	220, 200	0.5	2	2 - 8	Mono-,Oligosacharides, ....	GS NH 1.....
	GROM-SIL ... Amino-2 PA (cross linked Poly- NH <sub>2</sub> )	x			x	x	x	x	x	x	120	300	1.0		2 - 8	(Analysis of beverages), ....	GS NH 2.....
	GROM-SIL ... Amino-3 CP (encapsulated NH <sub>2</sub> -residues)	x		x	x	x	x	x	x	x	80	420	1.1		1.5 - 9	$\text{H}_2\text{O}$ -soluble Vitamins, ....	GS NH 3.....
	GROM-SIL ... Amino-4 PR (propylamine bonded to silica)	x	x	x	x	x	x	x	x	x	300	100	0.78		2 - 8	Additives, Steroids, ....	GS NH 4.....
Diol	GROM-SIL ... Diol		x	x	x	x	x	x	x	x	60, 120, 200, 300	580, 300, 200, 150	1.1, 1.0, 0.95, 0.7		2 - 8		GS OH 1.....
Si	GROM-SIL ... Normal Phase-1 ST (standard silica)	x	x	x	x	x	x	x	x	x	80, 100, ... 1000	220, 200, ...	0.5, 0.5, ..., 1.25		2 - 8	Vitamins, Cortisone, ....	GS NP 1.....
	GROM-SIL ... Normal Phase-2 SP (spherical silica)	x	x	x	x	x	x	x	x	x	60, 120, 200,...1000	580, 300, 200, ...	1.1, 1.0, 0.95, ...		2 - 8	SFC ...., Drugs, ....	GS NP 2.....
	GROM-SIL ... Normal Phase-3 PV (polyvinylalcohol)	x			x	x	x	x	x	x	120	300	1.0		2 - 8	Lipids, Steroids, Purines, Aflatoxins, ....	GS NP 3.....
	GROM-Sapphire	x	x	x	x	x	x	x	x	x	65, 110	500, 270	0.9, 1.1		2 - 8	tricyclic Antidepressives, ....	GS NP S.....
IEX	GROM-SIL ... SEC (size exclusion chromatography)		x	x	x	x	x	x	x	x	60, 120, 200, 300	580, 300, 200, 150	1.1, 1.0, 0.95, 0.7		2 - 8	Peptides, Glycoproteins, ....	GS SE 1.....
	GROM-SIL ... StrongAnion-1,	x	x	x	x	x	x	x	x	x	80, 100	220, 200	0.5, 0.5		2 - 8	Nucleosides, Nucleotides, ....	GS SA 1.....
	GROM-SIL ... Weak Anion-2 (ion exchange)	x		x	x	x	x	x	x	x	300	100	0.7		2 - 8	Nucleic acids (DNAs, RNAs), Polysaccharides, etc. ,	GS WA 1.....
	GROM-SIL ... StrongCation-1 (ion exchange)	x	x	x	x	x	x	x	x	x	80, 100	220, 200	0.5, 0.5		2 - 8	Peptides, Glycoproteins, ....	GS SC 1.....
	GROM-SIL ... Weak Cation-2 (ion exchange)	x	x	x	x	x	x	x	x	x	300	100	0.7		2 - 8	Nucleic acids (DNAs, RNAs), Polysaccharides, etc. ,	GS WC 1.....
	GROM-SIL ... HIC (hydrophobic interaction chrom.)		x	x	x	x	x	x	x	x	300	100	0.7		2 - 8		GS HI 1.....

Chiral Stationary Phases for Pharmacology, Medicine and

Biochemistry see pages 69 to 82 and 151