Column sets for the development

Cost-effective method development: saves both time and solvent consumption

For the development of new analytical methods, in particular for the selection of the appropriate stationary phase in a minimum of time and with extremely low solvent consumption, GROM offers its new Method-Development-sets. These consist of five cartridges packed with stationary phases of differing selectivity.

The use of short columns (60mm) and small particles (generally 3 µm, in a few cases 5 µm) results in significant savings of both time and solvent consumption in the process of optimising the various parameters of separation such as flow rate, eluent composition, temperature, gradient shape, etc. MD-Sets are available as cost-effective cartridges of 60 mm length and 2 or 4 mm internal diameter and can be operated with either standard column ends or with the ***NovoGROM*** quick connectors (see pages 107 and 113). With the microbore version (2 mm i.d.), the expenditure for solvents (purchase and disposal) is around 75% lower and the sensitivity approximately 4 times higher than with conventional 4 mm i.d. columns.

The combination of an MD-Set with an autoinjector and automatic column switching represents a highly convenient and elegant system for HPLC-method development. In order to guarantee highest quality, each column of the MD-Set is individually tested. The resolution attained not only allows effective screening of the experimental conditions, but often also fulfills many analytical requirements such as in product quality control or the monitoring of large-scale syntheses.

Method-Development-Sets
Composed of five cartridges (60 x 4 mm or 60 x 2 mm) filled with stationary phases of differing selectivity (without column ends and without quick connectors). The particle diameter is generally 3 µm.

# of chromatographic methods

Method Development Sets at a glance: 9 different Microbore MD-Sets and 8 analytical MD-Sets

MD-Set for „Peptides"	MD-Set for „Proteins"	MD-Set for „Standard Rev. Phases" -decreasing hydrophobicity
GROM-SIL 100 ODS-2 FE, 3 µm GROM-SIL 120 ODS-4 HE, 3 µm GROM-SIL 100 Octyl-2 AB, 3 µm GROM-SIL 120 Phenyl-2 CP, 5 µm GROM-SIL 120 Butyl-1 ST, 3 µm	GROM-SIL 300 Octyl-5 CP, 5 µm GROM-SIL 300 Phenyl-2 CP, 5 µm GROM-SIL 300 Butyl-2 FE, 3 µm GROM-SIL 300 SA-1, 3 µm GROM-SIL 300 WC-2 7 µm	GROM-SIL 080 ODS-7 pH, 4 µm GROM-SIL 100 ODS-0 AB, 3 µm GROM-SIL 100 Octyl-4 FE, 3 µm GROM-SIL 120 Butyl-1 ST, 3 µm GROM-SIL 120 TMS-2 CP, 5 µm
Order-Nr. GS ME1 0312 K 0602, resp. 04 (2 mm and 4 mm cartridges, respectively)	Order-Nr. GS ME2 0530 K 0602, resp. 04 (2 mm and 4 mm cartridges, respectively)	Order-Nr. GS ME3 0310 K 0602, resp. 04 (2 mm and 4 mm cartridges, respectively)

MD-Set for „Normal-Phase/ Reversed Phase"	MD-Set for „C 18-Phases" -with differing pore sizes-	MD-Set for „C18-Phases" -with differing C-content-
GROM-SIL 100 Amino-1 PR, 5 µm GROM-SIL 100 Cyan-2 PR, 3 µm GROM-SIL 120 Phenyl-2 CP, 5 µm GROM-SIL 120 TMS-2 CP, 5 µm GROM-SIL 100 Normal Ph-1, 3 µm	GROM-SIL 080 ODS-2 FE, 3 µm GROM-SIL 120 ODS-3 CP, 3 µm GROM-SIL 200 ODS-5 ST, 3 µm GROM-SIL 300 ODS-2 FE, 3 µm GROM-SIL 500 ODS-2 FE, 5 µm	GROM-SIL 100 ODS-1 PE, 3 µm GROM-SIL 100 ODS-2 FE , 3 µm GROM-SIL 120 ODS-3 CP, 3 µm GROM-SIL 120 ODS-5 ST, 3 µm GROM-SIL 080 ODS-7 pH , 4 µm
Order-Nr. GS ME4 0510 K 0602, resp. 04 (2 mm and 4 mm cartridges, respectively)	Order-Nr. GS ME5 0399 K 0602, resp. 04 (2 mm and 4 mm cartridges, respectively)	Order-Nr. GS ME6 0312 K 0602, resp. 04 (2 mm and 4 mm cartridges, respectively)

MD-Set for „Basic Compounds"	MD-Set for „Chiral Separations" -in 'normal' or 'reversed' mode-	MD-Set for „Free Choice" -custom assortment-
GROM-SIL 100 ODS-0 AB, 3 µm GROM-SIL 120 ODS-3 CP, 3 µm GROM-SIL 100 Octyl-2 AB, 3 µm GROM-SIL 120 Octyl-3 BA, 3 µm GROM-SIL 120 Phenyl-2 CP, 5 µm	CHIRA-GROM 1, 8 µm CHIRA-GROM 2, 8 µm CHIRA-GROM 3, 8 µm CHIRA-GROM 4, 8 µm CHIRA-GROM 9, 8 µm	consisting of 5 MD-cartridges with different, customer specified GROM SIL phases (except chiral phases) Please contact us for help!
Order-Nr. GS ME7 0312 K 0602, resp. 04 (2 mm and 4 mm cartridges, respectively)	Order-Nr. GS ME8 0891 K 06 02 (2 mm cartridges)	Order-Nr. GS ME 9 0000 K 06 02, resp. 04 (2 mm and 4 mm cartridges, respectively)

Note! Method-Development means in German „Methoden-Entwicklung"; therefore order numbers are always GS ME