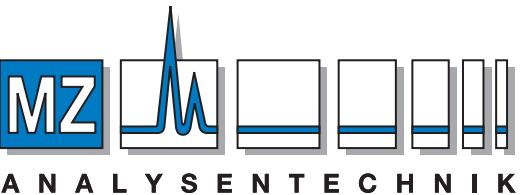


SPE Product Cross Reference Table



AUTHORIZED DISTRIBUTOR

MZ-Analysentechnik GmbH, Wöhlerstraße 2-6 • D-55120 Mainz

Tel +49 6131 68 66 19, Fax +49 6131 68 66 20

e-mail: info@mz-at.de, www.mz-at.de

Material	UCT	GL Sciences	Waters	Supelco	Agilent	S*Pure (ehemals GRACE)	Macherey-Nagel	Thermo Scientific
REVERSED PHASE								
C1					• Bond Elut C1			
C2	• Clean-Up® C02	• InertSep™ C2 • InertSep™ C2 FF • InertSep™ C2-NE	• Sep-Pak tC2		• Bond Elut C2		• Chromabond® C ₂	
C4	• Clean-Up® CN4			• LC-4 (500 Å)		• Vydac® BioSelect C4 ^[4]	• Chromabond® C ₄	
C8	• Clean-Up® C08	• InertSep™ C8 • InertSep™ C8 FF • InertSep™ C8-NE	• Sep-Pak C8	• ENVI-8 • DSC-8 • LC-8	• Bond Elut C8	• Maxi-Clean™ Octyl (C8) • Extract-Clean™ Octyl (C8)	• Chromabond® C ₈	• HyperSep™ C8
C18 (end capping)	• Clean-Up® C18 • Gravity flow XtrackT® XRODH	• InertSep™ C18 • InertSep™ C18 FF • InertSep™ C18-B • InertSep™ C18-B FF	• Sep-Pak tC18 • Sep-Pak C18	• ENVI-18 • DSC-18 • DSC-18Lt • LC-18	• Bond Elut C18 • Bond Elut C18 EWP (500 Å)	• Prevail™ C18 ^[1] • Standard C18 ^[1] • High-Flow C18 ^[2] • High-Capacity C18 ^[1] • Large Pore C18 ^[3] • Vydac® BioSelect C18 ^[4] • GracePure™ C18-Max, C18-Aq, C18-Low and C18-Fast	• Chromabond® C ₁₈ ec • Chromabond® C ₁₈ ec f	
C18 (without end capping)	• Clean-Up® C18 • Styre Screen® C18	• InertSep™ C18-C • InertSep™ C18-C FF			• Bond Elut C18-OH		• Chromabond® C ₁₈ • Chromabond® C ₁₈ f • Chromabond® C ₁₈ PAH • Chromabond® C ₁₈ Hydra	• HyperSep™ C18
C30	• Clean-Up® C30							
Cyclohexyl	• Clean-Up® CYH1	• InertSep™ CH			• Bond Elut CH		• Chromabond® C ₆ H ₁₁ ec	
Phenyl	• Clean-Up® PHY1	• InertSep™ PH • InertSep™ PH FF		• LC-Ph • DSC-Ph	• Bond Elut PH		• Chromabond® C ₆ H ₅	• HyperSep™ Phenyl
Cyanopropyl	• Clean-Up® CN1	• InertSep™ CN	• Sep-Pak Cyanopropyl	• LC-CN • DSC-CN	• Bond Elut CN-E		• Chromabond® CN	• HyperSep™ Cyano
Polystyrene/divinylbenzene	• Styre Screen® DVB	• InertSep™ PLS-2	• Sep-Pak PS2	• ENVI-Chrom P	• Bond Elut ENV • Bond Elut LMS		• Chromabond® HR-X • Chromabond® PS-RP • Chromabond® HR-P	
Graphitized carbon	• Clean-Up® CARB	• InertSep™ GC	• Sep-Pak AC2	• ENVI-Carb • ENVI-Carb Plus	• Bond Elut Carbon	• Carbograph		• HyperSep™ Hypercarb™

[1] Both available as Maxi-Clean™ and Extract-Clean™ SPE Cartridges

[2] Only available as Extract-Clean™ SPE Cartridge

[3] Only available as Maxi-Clean™ SPE Cartridge

[4] The same media as Vydac® 300 Å TP reversed-phase HPLC columns

Material	UCT	GL Sciences	Waters	Supelco	Agilent	S*Pure (ehemals GRACE)	Machery-Nagel	Thermo Scientific
----------	-----	-------------	--------	---------	---------	---------------------------	---------------	-------------------

N O R M A L P H A S E

Graphitized carbon	• Clean-Up® CARB	• InertSep™ GC		• ENVI Carb	• Bond Elut Carbon	• Carbograph		
Cyanopropyl	• Clean-Up® CN1	• InertSep™ CN	• Sep-Pak Cyanopropyl	• LC-CN	• Bond Elut CN-E	• Extract-Clean™ Cyanopropyl	• Chromabond® CN	• HyperSep™ Cyano
Aminopropyl	• Clean-Up® NAX1	• InertSep™ NH2 • InertSep™ NH2 FF	• Sep-Pak Aminopropyl	• LC- NH ₂ • DSC-NH ₂	• Bond Elut NH ₂	• Maxi-Clean™ Aminopropyl • Extract-Clean™ Aminopropyl • GracePure™ Amino	• Chromabond® NH ₂	• HyperSep™ Aminopropyl
Silica gel	• Clean-Up® CUSIL1 • Clean-Up® PHSIL1 • Gravity flow XtrackT® XRSIHT	• InertSep™ SI • InertSep™ SI FF	• Sep-Pak Silica	• LC- Si • DSC Si	• Bond Elut SI	• Maxi-Clean™ Silica • Extract-Clean™ Silica • GracePure™ Silica	• Chromabond® SiOH	• HyperSep™ Silica • HyperSep™ Acid Wash Silica
Neutral alumina	• Clean-Up® ALN	• InertSep™ AL-N	• Sep-Pak Alumina N	• LC- Alumina N	• Bond Elut Alumina N	• Maxi-Clean™ AL-N	• Chromabond® Alox N	
Acidic alumina	• Clean-Up® ALA	• InertSep™ AL-A	• Sep-Pak Alumina A	• LC- Alumina A	• Bond Elut Alumina A		• Chromabond® Alox A	
Basic alumina	• Clean-Up® ALB	• InertSep™ AL-B	• Sep-Pak Alumina B	• LC- Alumina B	• Bond Elut Alumina B		• Chromabond® Alox B	
Diol-Group	• Clean-Up® DOL1	• InertSep™ 2OH	• Sep-Pak Diol	• LC-Diol • DSC-Diol	• Bond Elut Diol	• Extract-Clean™ Diol	• Chromabond® OH (Diol)	• HyperSep™ Diol
Magnesium silicate (Florisil®)	• Clean-Up® FLS	• InertSep™ FL • InertSep™ FL-PR (Specifically for crop agrochemicals)	• Sep-Pak Florisil®	• LC Florisil® • ENVI-Florisil®	• Bond Elut FL	• Maxi-Clean™ Florisil® • Maxi-Clean™ Florisil®-PR (Specifically tested for chlorinated pesticides) • Extract-Clean™ Florisil® • GracePure™ Florisil®	• Chromabond® Florisil®	• HyperSep™ Florisil®

Material	UCT	GL Sciences	Waters	Supelco	Agilent	S*Pure (ehemals GRACE)	Machery-Nagel	Thermo Scientific
----------	-----	-------------	--------	---------	---------	---------------------------	---------------	-------------------

STRONG ANION-EXCHANGE CARTRIDGE

Quaternary ammonium salt	<ul style="list-style-type: none"> Clean-Up® QAX1 (Chlorid) Clean-Up® CAQAX1 (Acetat) Clean-Up® CHQAX1 (Hydroxid) Styre Screen® QAX (Chlorid) 	<ul style="list-style-type: none"> InertSep™ SAX 	<ul style="list-style-type: none"> Sep-Pak Accell Plus QMA 	<ul style="list-style-type: none"> LC- SAX DSC-SAX 	<ul style="list-style-type: none"> Bond Elut SAX 	<ul style="list-style-type: none"> Extract-Clean™ SAX GracePure™ Anion-X (both based on PS/DVB) 	<ul style="list-style-type: none"> Chromabond® SB Chromabond® PS-OH^[2] 	<ul style="list-style-type: none"> HyperSep™ SAX^[2]
--------------------------	---	---	---	--	---	---	---	---

WEAK ANION-EXCHANGE CARTRIDGE

Diethylamino Sorbent	<ul style="list-style-type: none"> Clean-Up® DAX1 				<ul style="list-style-type: none"> Bond Elut DEA 			
Aminopropyl	<ul style="list-style-type: none"> Clean-Up® NAX1 	<ul style="list-style-type: none"> InertSep™ NH2 InertSep™ NH2 FF 	<ul style="list-style-type: none"> Sep-Pak Aminopropyl 	<ul style="list-style-type: none"> LC- NH₂ DSC-NH₂ 	<ul style="list-style-type: none"> Bond Elut NH₂ 	<ul style="list-style-type: none"> Maxi-Clean™ Aminopropyl Extract-Clean™ Aminopropyl GracePure™ Amino 	<ul style="list-style-type: none"> Chromabond® NH₂ 	<ul style="list-style-type: none"> HyperSep™ Aminopropyl
Propyl ethylene-diamine	<ul style="list-style-type: none"> Clean-Up® PSA1 Gravity flow XtrackT® XRPSPH 	<ul style="list-style-type: none"> InertSep™ PSA InertSep™ PSA FF 		<ul style="list-style-type: none"> Supelclean™ PSA 	<ul style="list-style-type: none"> Bond Elut PSA 			
Polyimine Sorbent	<ul style="list-style-type: none"> Clean-Up® PAX 							

STRONG CATION-EXCHANGE CARTRIDGE

Propylsulfonic acid	<ul style="list-style-type: none"> Clean-Up® PCX1 Gravity flow XtrackT® XRPCH 	<ul style="list-style-type: none"> InertSep™ PRS 			<ul style="list-style-type: none"> Bond Elut PRS 		<ul style="list-style-type: none"> Chromabond® PSA 	
Benzene sulfonic acid	<ul style="list-style-type: none"> Clean-Up® BCX1 Clean-Up® BCX1HL (high load) Gravity flow XtrackT® XRBSH Styre Screen® BCX 	<ul style="list-style-type: none"> InertSep™ SCX 		<ul style="list-style-type: none"> LC- SCX DSC-SCX 	<ul style="list-style-type: none"> Bond Elut SCX 	<ul style="list-style-type: none"> Extract-Clean™ SCX GracePure™ Cation-X (both based on PS/DVB) 	<ul style="list-style-type: none"> Chromabond® SA Chromabond® PS-H^{+[2]} Chromabond® PS-Ag^{+[2]} Chromabond® PS-Ba^{2+[2]} 	<ul style="list-style-type: none"> HyperSep™ SCX^[2]
Sulfonic acid with silver (I)-counterion				<ul style="list-style-type: none"> DSC-Ag-Ion 				

WEAK CATION-EXCHANGE CARTRIDGE

Carboxylic acid	<ul style="list-style-type: none"> Clean-Up® CCX1 Gravity flow XtrackT® XRCCCH Styre Screen® CCX 	<ul style="list-style-type: none"> InertSep™ CBA InertSep™ MC-2^[1] 	<ul style="list-style-type: none"> Sep-Pak Accell Plus CM 	<ul style="list-style-type: none"> LC- WCX 	<ul style="list-style-type: none"> Bond Elut CBA 		<ul style="list-style-type: none"> Chromabond® PCA 	<ul style="list-style-type: none"> HyperSep™ Carboxylic acid
Triacetic acid sorbent	<ul style="list-style-type: none"> Clean-Up® TAX 			<ul style="list-style-type: none"> DSC-WCX 				

[1] GL Sciences InertSep™ MC-2 based on methacrylate polymer

[2] Exact type of functional group is unknown; Based on Polystyrene/Divinylbenzene

Material	UCT	GL Sciences	Waters	Supelco	Agilent	S*Pure (ehemals GRACE)	Machery-Nagel	Thermo Scientific
M I X E D - M O D E C A R T R I D G E								
Mixed C8 and Cyclohexyl sorbent	• Clean-Up® CYH2							
Mixed C8 and Benzene sulfonic acid sorbent	• Clean-Up® BCX2 • Clean Screen® DAU				• Bond Elut Certify			
Mixed C8 and Propylsulfonic acid sorbent	• Clean-Up® PCX2							
Mixed C8 and Carboxylic acid sorbent	• Clean-Up® CCX2							
Mixed C8 and Quaternary ammonium salt	• Clean-Up® QAX2				• Bond Elut Certify II			
Mixed C8 and Aminopropyl sorbent	• Clean-Up® NAX2							
Mixed C18 and Benzene sulfonic acid sorbent	• Clean-Up® BCX3 • Styre Screen® DBX			• DSC-MCAX				
Mixed C18 and Aminopropyl sorbent						• Chromabond® NH ₂ /C ₁₈		
Mixed sulfonic acid (SCX) and quaternary amine (SAX)					• Bond Elut AccuCAT		• Chromabond® PS-Mix ^[1]	
Mixed quaternary amine and Propyl ethylenediamine		• InertSep™ SAX/PSA		• Supelclean™ SAX/PSA				
Mixed Magnesium silicate (Florisil) and silica gel				• LC-Florisil®/Si				
Mixed Magnesium silicate (Florisil) and sodium sulfate				• Dual Layer Florisil®/Na ₂ SO ₄			• Chromabond® Na ₂ SO ₄ /Florisil®	
Mixed anion-exchange cartridge			• Oasis MAX • Oasis WAX		• Bond Elut Plexa PAX		• Chromabond® HR-XA • Chromabond® HR-XAW	
Mixed cation-exchange cartridge			• Oasis MCX • Oasis WCX		• Bond Elut Plexa PCX • Bond Elut Nexus WCX		• Chromabond® HR-XC • Chromabond® HR-XCW	
Mixed graphitized carbon and amino group cartridge			• Sep-Pak Carbon Black/Aminopropyl	• ENVI Carb/NH ₂	• Bond Elut Carbon/NH ₂			
Mixed graphitized carbon and Propyl ethylenediamine			• Sep-Pak Carbon Black/PSA	• ENVI-Carb-II/PSA	• Bond Elut Carbon/PSA			
Mixed graphitized carbon, Quaternary ammonium salt and Propyl ethylenediamine				• ENVI ENVI-Carb-II/SAX/PSA				
Mixed-Mode Copolymer					• Bond Elut Nexus			
Mixed sulfonic acid (SCX) and Si (unmodified Silica)		• InertSep™ PCB					• Chromabond® SA/SiOH • Chromabond® SiOH-H ₂ SO ₄ /SA	
Mixed Cyanopropyl and unmodified Silica gel							• Chromabond® CN/SiOH	

[1] Mixture of Chromabond® PS-OH⁻ and Chromabond® PS-H⁺; Exact type of functional groups is unknown; Based on Polystyrene/Divinylbenzene

Material	UCT	GL Sciences	Waters	Supelco	Agilent	S*Pure (ehemals GRACE)	Machery-Nagel	Thermo Scientific
S O R B E N T S B A S E D O N S T Y R E N E - D I V I N Y L B E N Z E N E C O P O L Y M E R ^[1]								
Polystyrene/divinylbenzene	• Styre Screen® DVB	• InertSep™ PLS-2 • InertSep™ RP-1 ^[2]	• Sep-Pak PS2	• ENVI-Chrom P	• Bond Elut ENV • Bond Elut LMS		• Chromabond® HR-X • Chromabond® PS-RP • Chromabond® HR-P	
Non-polar functionalized Polystyrene/divinylbenzene	• Styre Screen® C18	• InertSep™ RP-C18			• Bond Elut PPL			
Polar functionalized Polystyrene/divinylbenzene		• InertSep™ RP-2 • InertSep™ PLS-3 ^[3] • InertSep™ Pharma ^[3] • InertSep™ Pharma FF ^[3]					• Chromabond® EASY	• HyperSep™ PEP
Mixed Octadecyl (C18) and Benzenesulfonic Acid on Polystyrene/divinylbenzene-Core	• Styre Screen® DBX							
(Benzene)sulfonic Acid on Polystyrene/divinylbenzene-Core	• Styre Screen® BCX					• Extract-Clean™ SCX • GracePure™ Cation-X	• Chromabond® HR-XC	• HyperSep™ CX
C18 on Polystyrene/divinylbenzene-Core	• Styre Screen® C18	• InertSep™ RP-C18						
Carboxylic Acid on Polystyrene/divinylbenzene-Core	• Styre Screen® CCX						• Chromabond® HR-XCW	
Quaternary ammonium salt on Polystyrene/divinylbenzene-Core	• Styre Screen® QAX	• InertSep™ MA-1 ^[4]				• Extract-Clean™ SAX • GracePure™ Anion-X	• Chromabond® HR-XA • Chromabond® PS-OH ⁻	• HyperSep™ AX
Secondary and tertiary Amine on Polystyrene/divinylbenzene-Core							• Chromabond® HR-XAW	
Mixed anion-exchange cartridge					• Bond Elut Plexa PAX		• Chromabond® HR-XA • Chromabond® HR-XAW	
Mixed cation-exchange cartridge		• InertSep™ MPC (C18 and sulfonic acid)			• Bond Elut Plexa PCX		• Chromabond® HR-XC • Chromabond® HR-XCW	
Mixed anion and cation-exchange cartridge							• Chromabond® PS-Mix ^[5]	
Methacrylate polymer with weak anion exchange groups (tertiary amine) ^[4]		• InertSep™ MA-2 ^[4]						
Methacrylate polymer with strong cation exchange groups (sulfonic acid) ^[4]		• InertSep™ MC-1 ^[4]						
Methacrylate polymer with weak cation exchange groups (carboxylic acid) ^[4]		• InertSep™ MC-2 ^[4]						
Methacrylate polymer with weak Iminodiacetic Acid groups ^[4]		• InertSep™ ME-1 ^[4]						

[1] For GL Sciences some materials based on methacrylate (see superscript)

[2] GL Sciences InertSep™ RP-1 is a Copolymer consist of Styrene/Divinylbenzene and Methacrylat

[3] GL Sciences InertSep™ PLS-3, Pharma and Pharma FF is a Copolymer consist of Styrene/Divinylbenzene with N containing polar groups and Methacrylat

[4] Based on Methacrylate-Polymer

[5] Mixture of Chromabond® PS-OH⁻ and Chromabond® PS-H⁺; Exact type of functional groups is unknown

Material	UCT	GL Sciences	Waters	Supelco	Agilent	S*Pure (ehemals GRACE)	Machery-Nagel	Thermo Scientific
S P E C I A L P H A S E S								
Polar polymer cartridge			• PoraPak RDX • Oasis HLB		• Bond Elut Plexa		• Chromabond® EASY	• HyperSep™ PEP
Cartridge specialized for polychlorinated Biphenylene (PCB)		• InertSep™ PCB			• Bond Elut PCB		• Chromabond® SA/SiOH • Chromabond® SiOH-H ₂ SO ₄ /SA • Chromabond® NAN	
Diphenylhydrazin coated on Silica (specialized for pretreatment of aldehydes and ketones in air)			• Sep-Pak DNPH • Sep-Pak XPoSure Aldehyde sampler					
Solid supported liquid/liquid Extraction columns					• Chem Elut SLE			
Thiopropyl sorbent	• Clean-Up® THX							
Aldehyde sorbent	• Clean-Up® ALD							
Epoxy sorbent	• Clean-Up® EPX							
Isocyanate sorbent	• Clean-Up® ICN							
Cartridge specialized for drugs of abuse testing	• Clean Screen® DAU • Gravity Flow XtrackT® DAU (XRDAH) • Clean Screen® DAU (CSDAUA) (reduced solvent volume sorbent)						• Chromabond® DRUG	• HyperSep™ Verify CX
Cartridge specialized for THC and its metabolites	• Clean Screen® THC • Clean Screen® THC (CSTHCA) (reduced solvent volume sorbent) • Styre Screen® THC						• Chromabond® DRUG II	
Cartridge specialized for Gamma-hydroxybutyric acid (GHB)	• Clean Screen® GHB							
Cartridge specialized for Ethylglucuronide	• Clean Screen® ETG							
Cartridge specialized for Benzodiazepines (esp. 7-amino benzodiazepines)	• Clean Screen® BNZ							
Cartridge specialized for basic drugs including benzodiazepines and opiates	• Clean Screen XCEL® I							
Cartridge specialized for THC-Δ ⁹ -carboxylic acid	• Clean Screen XCEL® II							
Cartridge specialized for drugs from urine	• Clean Screen FAS ^t ®							
Cartridge specialized for THC-metabolites from urine	• Clean Screen FAS ^t ® THC							
Cartridge specialized for Ethylglucuronide/Ethylsulfid metabolites from urine	• Clean Screen FAS ^t ® EtG							

Cellulose sorbent					• Bond Elut Cellulose			
Cartridge specialized for Mycotoxines					• Bond Elut Mycotoxin			
Phenylboronic acid sorbent					• Bond Elut PBA			
Dry Sorbent (Sodium sulfate^[1])		• InertSep™ Dry ^[1]		• Sep-Pak Dry		• Bond Elut sodium sulfate		• Chromabond® Dry
Potassium iodide				• Sep-Pak Ozone Scrubber				
Polyamide resin		• InertSep™ PA		• DSC-DPA 6S			• Chromabond® PA	
Sulfoxide Resin				• Supelclean™ Sulfoxide				
Cartridge specialized for extraction and analysis of pesticides							• Chromabond® Diamino	
Cartridge specialized for acrylamide analysis							• Chromabond® Carbon A • Chromabond® ABC18	
Cartridge specialized for analysis of PAHs		• InertSep™ SlimJ Aroma-Blue					• Chromabond® C ₁₈ PAH • Chromabond® CN/SiOH • Chromabond® NH ₂ /C ₁₈	
Cartridge specialized for acidic drugs and metabolites (Mixed Mode Non-Polar and Ionic)								• HyperSep™ Verify AX
Hilic sorbent							• Chromabond® HILIC	
Cartridge specialized for analysis of tetracyclines							• Chromabond® Tetracycline	
Cartridge specialized for selective removal of phospholipides from biological samples							• Chromabond® PL	
Cartridge specialized for analysis of AOX from saline water (DIN 38409 - H22)							• Chromabond® HR-P-AOX	

[1] For GL Sciences InertSep™ Dry the Sorbent based on a sulfuric anhydride material