

USP L## packings for HPLC columns

| L | PACKING | BRAND NAME | MANUFACTURER/ VENDOR |
|----|---|---|--|
| L1 | Octadecyl silane chemically bonded to porous or non-porous silica or ceramic micro-particles, 1.5 to 10 µm in diameter, or a monolithic rod | Acclaim 120 C18 Acclaim Polar Advantage II ACE C18-300 ACE AQ ACE C18 ACE C18-AR ACE C18-PFP ACE Excel AQ ACE Excel C18 ACE Excel C18-AR ACE Excel C18-PFP AccQTag Ultra RP C18 ACQUITY UPLC CSH C18 ACQUITY UPLC BEH130 ACQUITY UPLC BEH 300 ACQUITY UPLC BEH C18 ACQUITY UPLC BEH Shield RP18 ACQUITY UPLC HSS C18 ACQUITY UPLC HSS C18 SB ACQUITY UPLC HSS T3 ACQUITY UPLC OST C18 Accucore C18 Accucore aQ Accucore 150-C18 Accucore XL C18 Adsorbosil C18 Adsorbosphere C18 Adsorbosphere HS C18 Adsorbosphere UHS C18 Adsorbosphere XL 300 C18 Adsorbosphere XL C18 Adsorbosphere XL C18-B Aegispak C18-F Aegispak C18-L Aeris PEPTIDE XB-C18 Aeris WIDEPOR E XB-C18 Allsphere ODS-1 Allsphere ODS-2 Allure C18 Allure Aqueous C18 Alltima C18 Alltima C18 LL Alltima HP C18 Alltima HP C18 EPS Alltima HP C18 Hi-Load Alltima HP C18 AQ Alltima HP C18 Amide Alltima WP C18 AlphaBond C18 Amethyst C18 Amplus C18-16 | Thermo Fisher Thermo Fisher Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Waters Corp. Thermo Fisher Thermo Fisher Thermo Fisher Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech YoungJinBiochrom YoungJinBiochrom Phenomenex Phenomenex Grace - Alltech Grace - Alltech Restek Corp. Restek Corp. Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Jones Sepax Technologies. Inc. ChromaNik Technol. |

| | | | |
|------------|---|--|---|
| L1 Cont | Octadecyl silane chemically bonded to porous or non-porous silica or ceramic micro-particles, 1.5 to 10 µm in diameter, or a monolithic rod | Amplus C18-30 APEX ODS Apollo C18 AQUA C18 Aquapore OD-300 C18 AQUASIL C18 Ascentis C18 Ascentis Express C18 ASI C18 ASI microC18 Atlantis dC18 Atlantis T3 Axxi-Chrom C18, ODS Bakerbond C18 BetaBasic 18 BetaMax Neutral BETASIL C18 Bio-C18 BioBasic 18 Bio-Sil ODS Bio-Sil ODS-10 Bondclone C18 BR-C18 Brownlee Validated C18 Burdick & Jackson C18 Cadenza CD-C18 Cadenza 5CD-C18 Cadenza CL-C18 Cadenza 5CL-C18 Cadenza CW-C18 Cadenza 5CW-C18 Cadenza HS-C18 Capcell C18 AG 120 Capcell C18 SG 120, 300 Capcell C18 UG 80, 120, 300 Capcell C18 MG Capcell C18 MGII Capcell C18 MGIII-H Capcell C18 ACR Capcell C18 AQ Capcell C18 IF Capcell Core C18 Capcell C18 IF2 Capcell Pak C18 MGIII-H Chemcosorb 5-ODS-H Chromegabond C18 Chromegabond WR-C18 Chromolith RP-18e Chromolith HighResolution RP-18e Clarity Oligo-MS Clarity Oligo-RP Clipeus C18 Cogent HPS C18 Cogent hQ C18 Cogent Simulare C18 Cogent MicroBee C18 Cogent Bidentate C18 | ChromaNik Technol. Grace PerkinElmer, Inc. Phenomenex PerkinElmer, Inc. Thermo Scientific Supelco Supelco Analytical Sciences Inc. Analytical Sciences Inc. Waters Corp. Waters Corp. Axxiom JT Baker Thermo Fisher Thermo Fisher Thermo Fisher Sepax Techonologies Thermo Fisher BIO-RAD Laboratories BIO-RAD Laboratories Phenomenex Sepax Techonologies PerkinElmer B&J Imtakt Imtakt Imtakt Imtakt Imtakt Imtakt Imtakt Imtakt Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Shiseido Dychrom ES Industries ES Industries Merck KgaA Merck KgaA Phenomenex Phenomenex Higgins Analytical MicroSolv Techn. Corp. MicroSolv Techn. Corp. MicroSolv Techn. Corp. MicroSolv Techn. Corp. MicroSolv Techn. Corp. |
|------------|---|--|---|

| | | | |
|------------|---|---|---|
| L1 Cont | Octadecyl silane chemically bonded to porous or non-porous silica or ceramic micro-particles, 1.5 to 10 µm in diameter, or a monolithic rod | HxSil C18 HydroBond PS-C18 Hichrom C18 Hydrosphere C18 Hyperclone BDS C18 Hyperclone ODS (C18) Hyperprep HS C18 Hypersil 100 C18 Hypersil AA ODS Hypersil BDS C18 Hypersil GOLD Hypersil GOLD aQ Hypersil-ODS Hypersil ODS-2 Hypersil Green PAH HyPURITY AQUASTAR HyPURITY C18 IBM Octadecyl IB-SIL C18 IB-SIL C18 BD Inertsil ODS Inertsil ODS series 1,2,3 INNO Column C18 ISCO C-18 J'Sphere ODS-H80 J'Sphere ODS-L80 J'Sphere ODS-M80 Jupiter C18 Kinetex C18 Kinetex XB-C18 Kromasil C18 Kromasil Eternity C18 Kromasil KR100-5-C18 LiChrospher PAH LiChrosorb RP-18 LiChrospher 100 RP-18 LiChrospher RP18e Luna C18 Luna C18(2) Macrosphere 300 C18 Meteoric Core C18 Meteoric Core C18 BIO MetroSep C18H MetroSep C18AQ MetroSep C18 AQ+ MetroSep C18SH MetroSep C18EPS MPLC RP-18 µBondapak C18 µBondapak C18 Radial-Pak Microsorb C18 MZ-Aqua Perfect C18 nanoAcquity BEH130 nanoAcquity BEH300 Nova-Pak C18 NUCLEODUR C18 Gravity NUCLEODUR C18 HTec | Hamilton Co. Mac-Mod Analytical, Inc. Hichrom YMC Co., Ltd. Phenomenex Phenomenex Thermo Fisher Thermo Fisher Agilent Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher IBM Instruments, Inc. Phenomenex Phenomenex GL Sciences GL Sciences YoungJinBiochrom ISCO, Inc. YMC Co., Ltd. YMC Co., Ltd. YMC Co., Ltd. Phenomenex Phenomenex Phenomenex Akzo Nobel Separations Akzo Nobel Separations Akzo Nobel Separations Merck KgaA Merck KgaA Merck KgaA Merck KgaA Phenomenex Phenomenex Grace – Alltech YMC Co., Ltd. YMC Co., Ltd. Metrohm-Peak, Inc. Metrohm-Peak, Inc. Metrohm-Peak, Inc. Metrohm-Peak, Inc. Metrohm-Peak, Inc. PerkinElmer, Inc. Waters Corp. Waters Corp. Agilent MZ Analysentechnik Waters Corp. Waters Corp. Waters Corp. Macherey-Nagel Macherey-Nagel |
|------------|---|---|---|

| | | | |
|-------------|---|--|---|
| L1 cont. | Octadecyl silane chemically bonded to porous or non-porous silica or ceramic micro-particles, 1.5 to 10 µm in diameter, or a monolithic rod | PerfectSil Target ODS-3 PerfectSil Target ODS-3 HD Peptica C18 serresA,B,C Pfarma C18 series A,B,C Pinnacle II C18 Pinnacle DB C18 Pinnacle DB Aqueous C18 Platinum C18 Platinum EPS C18 Platinum 300 C18 Polaris C18-A Polaris C18-Ether Polygosil 60-7 C18 Polygosil C18 Polygosil C18 60 ^a Poroshell 120 EC-C18 Poroshell 120 SB-C18 Premier C18 Prep Nova-Pak HR C18 Presto FF-C18 Prevail C18 Prevail OA Prevail Select C18 PrimeSphere C18-HC Prodigy ODS(3) ProntoSIL C18 H ProntoSIL C18 SH ProntoSIL C18 AQ ProntoSIL C18 AQ Plus ProntoSIL C18 ace-EPS ProSphere 300 C18 ProSphere 300 PAH ProSphere HP C18 ProSphere HP C18 AQ ProSphere HP C18 ZAP! ProteCol-G C18 HQ203 ProteCol-P C18 HQ105 ProteCol-P C18 HPH125 ProteCol-P C18 GP125 Purospher RP-18 Purospher RP18e Purospher STAR RP18e Pursuit C18 Pursuit XRs C18 Radial-Pak C18 Reduced Activity C18 Regis ODS Resolve C18 Resolvex C18 Sarasep P C18 Scherzo SM-C18 Scherzo SS-C18 Scherzo SW-C18 SelectaPore 90M, 300P, 300M Shodex C18 Shodex ODSpak F-411 Shodex Silica C18M | MZ Analysentechnik MZ Analysentechnik Diazem Diazem Restek Corp. Restek Corp. Restek Corp. Grace - Alltech Grace - Alltech Grace - Alltech Agilent Agilent Macherey-Nagel Macherey-Nagel Macherey-Nagel Agilent Agilent Shimadzu Waters Corp. Imtakt Grace - Alltech Grace - Alltech Grace - Alltech Phenomenex Phenomenex Bischoff Chromatography Bischoff Chromatography Bischoff Chromatography Bischoff Chromatography Bischoff Chromatography Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech SGE Analytical Science SGE Analytical Science SGE Analytical Science SGE Analytical Science Merck KgaA Merck KgaA Merck KgaA Agilent Agilent Waters Corp. No information available Regis Instruments Waters Corp. Fisher Scientific Transgenomic, Inc. Imtakt Imtakt Imtakt The Separations Group, Inc. Shodex Shodex Shodex |
|-------------|---|--|---|

| | | | |
|-------------|---|---|---|
| L1 cont. | Octadecyl silane chemically bonded to porous or non-porous silica or ceramic micro-particles, 1.5 to 10 µm in diameter, or a monolithic rod | Shodex Silica C18P SiliaChrom AQ C18 SiliaChrom dt C18 SiliaChrom SB C18 SiliaChrom XDB C18 SiliaChrom XDB1 C18 SiliaChrom XDB2 C18 SiliaChrom XT C18 SiliaChrom XT Fidelity C18 Spectraphysics C18 Speedcore C18 Spheri-(5 and 10) RP-18 Spheri-(5 and 10) ODS C18 Spherisorb ODS1 Spherisorb ODS2 Spherisorb ODS-B STR ODS-II STR ODS-M Sunfire C18 Sunniest C18 Sunniest C18-HT Sunrise C18 Sunrise C18-SAC SunShell C18 SunShell C18-WP SunShell HFC18-16 SunShell HFC18-30 Sunsil C18 SUPELCOSIL LC-18 SUPELCOSIL LC-18-DB SUPELCOSIL LC-318 SUPELCOSIL LC-PAH SUPELCOSIL LC-18-T SUPELCOSIL LC-18-S Superiorex Superspher 100 RP-18 Superspher RP18e Symmetry C18 SymmetryPrep C18 Symmetry300 C18 SymmetryShield RP18 SynChropak RPP SynChropak RPP-1000 SynChropak RPP-4000 SynChropak RPP-100 SynChropak RPS-100 Synchronis C18 Synchronis aQ Synergi Fusion-RP Synergi Hydro-RP Targa C18 Titan C18 Topsil C18 TSKgel ODS-100V TSKgel ODS-100Z TSKgel ODS-100S TSKgel Super-ODS | Shodex SiliCycle Inc SiliCycle Inc SiliCycle Inc SiliCycle Inc SiliCycle Inc SiliCycle Inc SiliCycle Inc SiliCycle Inc SiliCycle Inc Spectra Physics Inc. Fortis Technologies PerkinElmer, Inc. PerkinElmer, Inc. Waters Corp. Waters Corp. Waters Corp. Shinwa Shinwa Waters Corp. ChromaNik Technol. ChromaNik Technol. ChromaNik Technol. ChromaNik Technol. ChromaNik Technol. ChromaNik Technol. ChromaNik Technol. Sun Life Sciences Supelco Supelco Supelco Supelco Supelco Supelco Supelco Shiseido Merck, KgaA Merck, KgaA Waters Corp. Waters Corp. Waters Corp. Waters Corp. Eprogen, Inc. Eprogen, Inc. Eprogen, Inc. Eprogen, Inc. Eprogen, Inc. Thermo Fisher Thermo Fisher Phenomenex Phenomenex Higgins Analytical Supelco Welch Materials, Inc. Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience |
|-------------|---|---|---|

| | | | |
|-------------|---|--|--|
| L1 cont. | Octadecyl silane chemically bonded to porous or non-porous silica or ceramic micro-particles, 1.5 to 10 µm in diameter, or a monolithic rod | TSKgel ODS-80Tm TSKgel ODS-80Ts TSKgel ODS-120A TSKgel ODS-120T TSKgel ODS-140HTP TSKgel OligoDNA-RP Ultimate AQ-C18 Ultimate XB-C18 Ultisil AQ-C18 Ultisil XB-C18 Ultra C18 Ultra Aqueous C18 Ultra II C18 Ultra II Aqueous C18 Ultracarb ODS Ultrasphere ODS Ultrasphere C18-IP Ultremex C18 Ultron VX-ODS UniverSil C18 UniverSil HS C18 Unison UK-C18 Unison US-C18 Uptisphere ODB Uptisphere HDO Uptisphere NEC Uptisphere TF Uptisphere PAH Uptisphere Strategy C18-3 Uptisphere Strategy C18-2 Uptisphere Strategy RP Uptisphere Strategy NEC Uptisphere X-Serie OD2 Uptisphere X-Serie C18 Uptisphere 300A WOD Uptisphere 300A PXP Velosep RP-18 VisionHT C18 VisionHT C18-B VisionHT C18HL VisionHT C18-P Viva C18 Vydac 201TP Vydac 202TP Vydac 218MS Vydac 218TP Vydac 238MS Vydac C18 Wakosil C18 RS 3 and 5 Wakosil 5C18 HG and AR Wakopak Wakosil-II 3C18 HG Wakopak Wakosil-II 3C18 AR Wakopak Wakosil-II 3C18 RS Wakopak Wakosil-II 5C18 Wakopak Wakosil-II 5C18-100 Wakopak Wakosil-II 5C18 HG Wakopak Wakosil-II 5C18 AR | Tosoh Bioscience Tosoh Bioscience. Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Welch Materials, Inc. Welch Materials, Inc. Welch Materials, Inc. Restek Corp. Restek Corp. Restek Corp. Restek Corp Phenomenex Hichrom Hichrom Phenomenex Shinwa Fortis Technologies Fortis Technologies Imtakt Imtakt Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim Interchim PerkinElmer, Inc. Grace-Alltech Grace-Alltech Grace-Alltech Grace-Alltech Restek Corp. Grace - Vydac Grace - Vydac Grace - Vydac Grace - Vydac Grace - Vydac Grace - Vydac Grace - Vydac SGE Analytical Science SGE Analytical Science Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. |
|-------------|---|--|--|

| | | | |
|----|---|--|--|
| | | ZORBAX StableBond C18 | Agilent Technologies |
| L2 | Octadecyl silane chemically bonded to silica gel of a controlled surface porosity that has been bonded to a solid spherical core, 30 to 50 µm in diameter | Bondapak Prep C18 Generick C18 Pellicular C18 Permaphase ETH Permaphase ODS Wakopak Wakosil 40C18 Zodiac Prep C18 | Waters Corp. Sepax Technologies Grace - Alltech DuPont DuPont Wako Pure Chemical Ind. Zodiac Life Sciences |
| L3 | Porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Accucore HILIC ACQUITY UPLC BEH HILIC Adsorbosil Silica Adsorbosphere HS Silica Adsorbosphere Silica Adsorbosphere XL Silica Allsphere Silica Alltima Silica Alltima HP Silica Alltima HP HILIC Allure Silica AlphaBond Silica Amethyst Silica APEX Si Aquaphore SI-300 Ascentis Express HILIC Ascentis Silica Atlantis HILIC Silica BETASIL Silica 100 Bondclone Silica Chromegasphere Chromolith Si Cogent HPS Silica Cogent MicroBee Silica CORTECS HILIC CORTECS UPLC HILIC Cosmosil SL-II DAISO Silica Deltabond Silica Econosil Silica Econosphere Silica Enable Silica Fortis HILIC Genesis Si Haisil 100 HALO HILIC HP-Silica Hyperclone Silica Hypersil GOLD Silica Hypersil Silica HyperPrep HS Silica IB-SIL Silica Inertsil Silica Kinetex HILIC Kromasil Si LiChrosorb Si 100 LiChrosorb Si 60 LiChrospher Si-60 LiChrospher Si-100 | Thermo Fisher Waters Corp. Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Restek Corp. Grace - Alltech Sepax Technologies, Inc. Grace - Jones PerkinElmer, Inc. Supelco Supelco Waters Corp. Thermo Fisher Phenomenex ES Industries Merck KGaA MicroSolv Techn. Corp. MicroSolv Techn. Corp. Waters Corp. Waters Corp. Nacalai Tesque, Inc. DAISO Fine Chem USA, Inc. Thermo Fisher Grace - Alltech Grace - Alltech Spincotech Fortis Technologies Grace - Jones Higgins Analytical Advanced Mat. Tech. Sepax Technologies Phenomenex Thermo Fisher Thermo Fisher Thermo Fisher Phenomenex GL Sciences Phenomenex Akzo Nobel Separations Merck KGaA Merck KGaA Merck KGaA Merck KGaA |

| | | | |
|------------|--|---|--|
| L3 cont | Porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Luna Silica(2) µPorasil MicroSorb Si Nova-Pak Silica NUCLEODUR SiOH Nucleosil SiOH Onyx Silica Optimisil AQ Silica Partisil Silica Partisphere Silica Peerless Silica PerfectChrom 60 Sil PerfectChrom 100 Sil PerfectSil 100 Sil PerfectSil 120 Sil PerfectSil 300 Sil PerfectSil 1000 Sil PerfectSil Target Sil 100 Pinnacle II Silica Pinnacle DB Silica Platinum Silica Polygosil Silica Polygosil Si 100A Polygosil Si 60A Prep Nova-Pak HR Silica Prevail Silica Prodigy Silica ProntoSIL SI ProSphere Silica Purospher STAR Si Pursuit Si Pursuit XRs Si Resolve Silica Shodex Silica 5SIL SiliaChrom dt Si SiliaChrom XDB Si SiliaChrom XDB1 Si Si Ultrasphere Speedcore HILIC Spheri-(5 and 10)-Si Spherisorb Silica Spherosil XOA 600 SunFire Silica SUPELCOSIL LC-Si SUPELCOSIL LC-3Si Synchronis Silica TSKgel Silica-60 Ultra Silica Ultra II Silica Ultrasphere Silica Ultron VX-SIL Unison UK-Silica Uptisphere Silica Uptisphere Strategy Silica Uptisphere Strategy HILIC VisionHT HILIC VisionHT Silica | Phenomenex Waters Corp. Agilent Waters Corp. Macherey-Nagel Macherey-Nagel Phenomenex CVC Technologies Hichrom Hichrom Chromatopak MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik Restek Corp Restek Corp. Grace - Alltech Macherey Nagel Macherey Nagel Macherey Nagel Waters Corp. Grace – Alltech Phenomenex Bischoff Chromatography Grace – Alltech Merck KgaA Agilent Agilent Waters Corp. Shodex SiliCycle Inc SiliCycle Inc SiliCycle Inc Shiseido Fortis Technologies Shiseido Waters Corp. Beckman Instruments Waters Corp. Supelco Supelco Thermo Fisher Tosoh Bioscience Restek Corp. Restek Corp Hichrom Shinwa Imtakt Interchim Interchim Interchim Grace-Alltech Grace-Alltech |
|------------|--|---|--|

| | | | |
|------------|--|--|---|
| L3 cont | Porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Viva Silica Vydac 101MS Vydac 101SP Vydac 101TP Wakopak Wakosil-II 5SIL-AQ Wakopak Wakosil 5SIL Wakopak Wakosil 10 SIL Wakopak Wakosil 5SIL-120 Wakopak Wakosil 7SIL-120 Wakopak Wakosil 10SIL-120 Wakopak Wakosil 5SIL Prep XBridge HILIC YMC-Pack Silica 60, 120, 200, 300A Zodiac Silica ZORBAX SIL ZORBAX Rx-SIL | Restek Corp. Grace - Vydac Grace - Vydac Grace - Vydac Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Waters Corp. YMC Co., Ltd. Zodiac Life Sciences Agilent Technologies Agilent Technologies |
| L4 | Silica gel of controlled surface porosity bonded to a solid spherical core, 30 to 50 µm in diameter | Guard Si HC Pellosil Pellicular Silica Porasil Prep Silica Wakopak Wakosil 40 SIL Zodiac Prep Silica | Agilent Whatman Inc. Grace - Alltech Waters Corp. Wako Pure Chemical Ind. Zodiac Life Sciences |
| L5 | Alumina of controlled surface porosity bonded to a solid spherical core, 30 to 50 µm in diameter | | |
| L6 | Strong cation-exchange packing-sulfonated fluorocarbon polymer coated on a solid spherical core, 30 to 50 µm in diameter | Adsorbosphere XL SCX Partisil SCX Zipax SCX Zodiac Prep SCX | Grace - Alltech Hichrom DuPont Zodiac Life Sciences |
| L7 | Octylsilane chemically bonded to totally or superficially porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Acclaim 120 C8 ACE C8-300 ACE C8 ACE Excel C8 Accucore C8 Accucore XL C8 ACQUITY UPLC BEH C8 Adsorbobil C8 Adsorbosphere C8 Adsorbosphere XL 300 C8 Adsorbosphere XL C8 Adsorbosphere XL C8-B Aegispak C8 Aeris WIDEPORE XB-C8 Allsphere C8 Alltech 600 RP8 Alltima C8 Alltima HP C8 AlphaBond C8 Amethyst C8 Amplus C8-30 APEX C8 Aquapore RP-300 C8 AquaSep C8 Ascentis C8 Ascentis Express C8 B&J Octyl, High Ligand Dens Bakerbond C8 | Thermo Fisher Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Thermo Fisher Thermo Fisher Waters Corp. Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech YoungJinBiochrom Phenomenex Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Sepax Technologies, Inc. ChromaNik Technol. Grace - Jones PerkinElmer, Inc. ES Industries Supelco Supelco Burdick & Jackson JT Baker |

| | | | |
|------------|--|--|---|
| L7 cont | Octylsilane chemically bonded to totally or superficially porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Hyperclone BDS C8 Hyperclone MOS (C8) Hypersil BDS C8 Hypersil GOLD C8 Hypersil MOS Hypersil MOS-2 Hypersil HS C8 HyPurity C8 IB-SIL C8 IB-SIL C8 BD Inertsil C8 Inertsil C8-3 Kinetex C8 Kromasil C8 LiChrosorb RP8 LiChrosorb RP Select B LiChrospher 60 RP-select B LiChrospher 100 RP 8-E LiChrospher RP-Select B Luna C8 Luna C8(2) Macrosphere C8 Maxsil 5-C8 Meteoric Core C8 Microsorb C8 Nova-Pak C8 NUCLEODUR 100 C8 ec NUCLEODUR C8 Gravity Nucleosil C8 Nucleosil C8 ec Nucleosil C8 HD Nucleosil Protect I Onyx C8 Optimisil LP C8 Optimisil MF C8 Orbit 100 C8 Partisil C8 Partisphere C8 Pecosphere C8 Peerless Basic C8 Peerless C8 Peerless LC-C8 Peerless HT-C8 PerfectBond C8 PerfectBond C8-H PerfectBond C8-HD PerfectChrom 100 C8 PerfectChrom 100 C8M PerfectSil 100 C8-3 PerfectSil 120 C8 PerfectSil 300 C8 PerfectSil Target C8 HD PerfectSil Target C8-3 Peptica C8 series A,B,C Pfarma C8 series A,B,C Pinnacle II C8 Pinnacle DB C8 | Phenomenex Phenomenex Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher Phenomenex Phenomenex GL Sciences GL Sciences Phenomenex Akzo Nobel Separations Merck KgaA Merck KgaA Merck KgaA Merck KgaA Merck KgaA Phenomenex Phenomenex Grace - Alltech Phenomenex YMC Co., Ltd. Agilent Waters Corp. Macherey-Nagel Macherey-Nagel Macherey-Nagel Macherey-Nagel Macherey-Nagel Macherey-Nagel Phenomenex CVC Technologies CVC Technologies MZ Analysentechnik Hichrom Hichrom PerkinElmer, Inc. Chromatopak Chromatopak Chromatopak Chromatopak MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik Diazem Diazem Restek Corp Restek Corp. |
|------------|--|--|---|

| | | | |
|------------|---|--|--|
| L7 cont | Octylsilane chemically bonded to totally or superficially porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod | Platinum C8 Platinum EPS C8 Platinum 300 C8 Polaris C8-A Polaris C8-Ether Polygosil C8 Polygosil C8 60 ^a Prevail C8 Prodigy C8 ProntoSIL C8 SH ProntoSIL C8 ace-EPS ProteCol-G C8 HQ125 ProteCol-G HQ1003 Purospher STAR RP8e Pursuit C8 Pursuit XRs C8 RP-300 Aquapore Octyl Resolve C8 Resolvex C8 Shodex Silica 5C8 SiliaChrom AQ C8 SiliaChrom SB C8 SiliaChrom XDB C8 SiliaChrom XDB1 C8 Spheri-(5 and 10) RP 8 Spheri-(5 and 10)-OSS C8 Spherisorb C8 Sunfire C8 Silica Sunnest C8 SunShell C8 Sunsil C8 SUPELCOSIL LC-308 SUPELCOSIL LC-8 SUPELCOSIL LC-8-DB Superspher 60 RP-Select B Symmetry C8 SymmetryPrep C8 SymmetryShield RP8 SynChropak RP8 SynChropak RP8-1000 Targa C8 TSKgel Super-Octyl TSKgel Octyl-80Ts Ultimate XB-C18 Ultisil XB-C8 Ultra C8 Ultra II C8 Ultrasphere C8 Ultrasphere ODS Ultremex C8 Ultron VX-Octyl Unison UK-C8 Uptisphere Strategy C8-2 Uptisphere C8 UptisphereC8U Uptisphere X-Serie C8 Uptisphere 300A WC8 | Grace - Alltech Grace - Alltech Grace – Alltech Agilent Agilent Macherey Nagel Macherey Nagel Grace – Alltech Phenomenex Bischoff chromatography Bischoff Chromatography SGE Analytical Science SGE Analytical Science Merck KgaA Agilent Agilent PerkinElmer, Inc. Waters Corp. Fisher Scientific Shodex SiliCycle Inc SiliCycle Inc SiliCycle Inc SiliCycle Inc PerkinElmer, Inc. PerkinElmer, Inc. Waters Corp. Waters Corp. ChromaNik Technol. ChromaNik Technol. Sun Life Sciences Supelco Supelco Supelco Merck KgaA Waters Corp. Waters Corp. Waters Corp. Eprogen, Inc. Eprogen, Inc. Higgins Analytical Tosoh Bioscience Tosoh Bioscience Welch Materials, Inc. Welch Materials, Inc. Restek Corp. Restek Corp Hichrom Hichrom Phenomenex Shinwa Imtakt Interchim Interchim Interchim Interchim Interchim |
|------------|---|--|--|

| | | | |
|------------|---|---|---|
| L8 cont | An essentially monomolecular layer of aminopropylsilane chemically bonded to totally porous silica gel support, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Hypersil GOLD Amino IB-SIL Amino Kromasil NH2 LiChrosorb NH2 LiChrospher NH2 Luna NH2 µBondapak NH2 MicroSorb NH2 NUCLEODUR NH2 NUCLEODUR NH2-RP Nucleosil Carbohydrate Nucleosil NH2 Nucleosil NH2 RP Optimisil AQ-Amino Peerless Amino PerfectChrom 100 NH2 PerfectSil 100 NH2 PerfectSil 120 NH2 PhenoSphere NH2 Pinnacle II Amino Platinum NH2 Polaris NH2 Polygosil NH2 Polygosil NH2 60A ProntoSIL AMINO ProntoSIL AMINO H ProntoSIL AMINO E Purospher STAR NH2 Shodex Silica 5NH SiliaChrom XDB1 Amino Spheri-(5 and 10) amino Spherisorb NH2 SUPELCOSIL LC-NH ₂ SUPELCOSIL LC-NH ₂ -NP Synchronis Amino TSKgel NH2-100 Ultra Amino Unison UK-Amino Uptisphere Strategy NH2 Uptisphere NH2 Wakopak Wakosil 5NH2 YMC-Pack NH2 Zodiac Amino Zodiac Amino (1) Zodiac Amino (2) ZORBAX Carbohydrate ZORBAX NH2 | Thermo Fisher Phenomenex Akzo Nobel Separations Merck KgaA Merck KgaA Phenomenex Waters Corp. Agilent Macherey-Nagel Macherey-Nagel Macherey-Nagel Macherey-Nagel Macherey-Nagel CVC Technologies Chromatopak MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik Phenomenex Restek Corp. Grace – Alltech Agilent Macherey Nagel Macherey Nagel Bischoff Chromatography Bischoff Chromatography Bischoff Chromatography Merck KgaA Shodex SiliCycle Inc Perkinelmer, Inc. Waters Corp. Supelco Supelco Thermo Fisher Tosoh Bioscience Restek Corp. Imtakt Interchim Interchim Wako Pure Chemical Ind. YMC Co., Ltd. Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Agilent Technologies Agilent Technologies |
| L9 | Irregular or spherical, totally porous silica gel having a chemically bonded, strongly acidic cation-exchange coating, 3 to 10 µm in diameter. | Capcell SCX UG 80 Chromegabond P-SCX Diazem C8 SCX Diazem SCX Diazem SCX 4-204 HP-SCX IonoSpher C Luna SCX Maxsil SCX Nucleosil SA | Shiseido ES Industries Diazem Diazem Diazem Sepax Technologies Agilent Phenomenex Phenomenex Macherey-Nagel |

| | | | |
|------------|--|---|--|
| L9 cont | Irregular or spherical, totally porous silica gel having a chemically bonded, strongly acidic cation-exchange coating, 3 to 10 µm in diameter. | Partisil SCX Partisphere SCX PerfectChrom 100 SCX SiliaChrom SCX Spherisorb SCX SUPELCOSIL LC-SCX SynChropak S300 TSKgel SP-2SW Uptisphere SCX Wakopak Wakosil 5SCX Zodiac SCX Zodiac SCX(1) ZORBAX 300SCX | Hichrom Hichrom MZ Analysentechnik SiliCycle Inc Waters Corp. Supelco Eichrom Technologies, Inc. Tosoh Bioscience Interchim Wako Pure Chemical Ind. Zodiac Life Sciences Zodiac Life Sciences Agilent Technologies |
| L10 | Nitrile groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | ACE CN-300 ACE CN ACE Excel CN ACQUITY UPLC HSS CN Adsorbosil CN Adsorbosphere CN Adsorbosphere CN-AQ Adsorbosphere XL CN Allsphere CN Alltima CN Alltima HP Cyano Allure Basix AlphaBond CN APEX CN Ascentis ES Cyano Ascentis Express ES-Cyano BetaBasic CN BETASIL CN BioBasic CN Bondclone CN Capcell CN SG 120, 300 Capcell CN UG 120 Chromegabond CN Chromolith CN Clipeus Cyano CN Ultrasphere Cogent HPS Cyano Cogent simulare Cyano Cogent MicroBee Cyano Cosmosil CN-MS DELTABOND CYANO Develosil CN-UG Diazem CN 120A, 200A Discovery Cyano Econosil CN Econosphere CN Enable Cyano Fortis Cyano Genesis CN HALO ES-CN HALO Peptide ES-CN HP-Cyano Hyperclone CN (CPS) | Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Waters Corp. Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Restek Corp. Alltech Associates, Inc. Grace – Jones Supelco Supelco Thermo Fisher Thermo Fisher Thermo Fisher c Phenomenex Shiseido Shiseido ES Industries Merck KgaA Higgins Analytical Beckman Instruments MicroSolv Techn. Corp. MicroSolv Techn. Corp. MicroSolv Techn. Corp. Nacalai Tesque, Inc. Thermo Fisher Nomura Chemical Diazem Supelco Grace - Alltech Grace – Alltech Spincotech Fortis Technologies Grace – Jones Advanced Materials Tech. Advanced Materials Tech. Sepax Technologies Phenomenex |

| | | | |
|-------------|--|--|---|
| L10 cont | Nitrile groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Hypersil BDS CN Hypersil CPS Hypersil CPS-2 Hyperprep GOLD CN HyPURITY CN Inertsil CN-3 Kromasil CN LiChrosorb CN LiChrospher CN Luna CN µBondapak CN MicroSorb CN NovaPak CN NovaPak CN HP NUCLEODUR 100 CN NUCLEODUR 100 CN-RP Nucleosil CN Nucleosil CN-RP Optimisil AQ Cyano Orbit 100 CN Peptica CN-A Peerless Cyano PerfectChrom 100 CN PerfectSil 100 CN-3 PerfectSil 120 CN PerfectSil Target CN-3 Pinnacle II Cyano Pinnacle DB Cyano Platinum CN Polygosil CN Polygosil CN 60A ProntoSIL CN Prevail CN Regis Nitrile Resolve CN Shodex Silica 5CN SiliaChrom XDB1 CN Spheri-(5 and 10)-CN Spherisorb CN SUPELCOSIL LC-CN SUPELCOSIL LC-PCN TSKgel CN-80Ts Ultra Cyano Ultrasphere CN Ultremex CN Uptisphere CN Wakopak Wakosil-II 5CN Wakopak Wakosil 5CN Wakopak Combi CN XSelect HSS CN YMC-Pack CN Zodiac CN Zodiac CN(1) Zodiac 100 CN Zodiac 120 CN Zodiac 120 CN ZORBAX Eclipse XDB-CN | Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher GL Sciences Akzo Nobel Separations Merck KgaA Merck KgaA Phenomenex Waters Corp. Agilent Waters Corp. Waters Corp. Macherey-Nagel Macherey-Nagel Macherey-Nagel Macherey-Nagel CVC Technologies MZ Analysentechnik Diazem Chromatopak MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik Restek Corp Restek Corp. Grace - Alltech Macherey Nagel Macherey Nagel Bischoff Chromatography Grace - Alltech Regis Instruments Waters Corp. Shodex SiliCycle Inc Perkinelmer, Inc. Waters Corp. Supelco Supelco Tosoh Bioscience Restek Corp. Hichrom Phenomenex Interchim Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Waters Corp. YMC Co., Ltd. Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Agilent Technologies |
|-------------|--|--|---|

| | | | |
|-------------|--|---|--|
| L10 cont | Nitrile groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | ZORBAX 300StableBond-CN ZORBAX CN ZORBAX StableBond-CN | Agilent Technologies Agilent Technologies Agilent Technologies |
| L11 | Phenyl groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Accucore Phenyl-Hexyl ACE Phenyl-300 ACE Phenyl ACE Excel Ph ACQUITY UPLC CSH Phenyl-Hexyl ACQUITY UPLC BEH Phenyl Adsorbosphere Phenyl Adsorbosphere XL Phenyl Allsphere Phenyl Alltima Phenyl Allure Biphenyl alphaBond Phenyl APEX Phenyl Ascentis Phenyl Ascentis Express Phenyl-Hexyl BetaBasic Phenyl BETASIL Phenyl BETASIL Phenyl-hexyl BioBasic Phenyl Bondclone Phenyl Capcell Phenyl SG 120, 300 Capcell Phenyl UG 120 Chromegabond P-BD Chromolith Phenyl Clipeus Phenyl Cogent HPS Phenyl Cogent Simulare Phenyl Cogent MicroBee Phenyl Cosmosil PE-MS Cosmosil Ph-AR-300 Diazem Phenyl Enable Phenyl Fortis Diphenyl Gemini C6-Phenyl Genesis Phenyl GP-Phenyl HALO Phenyl-Hexyl Hydrocell Phenyl NP10 Hydrocell Phenyl 1500 Hypersil BDS Phenyl Hypersil GOLD Phenyl Hypersil Phenyl Hypersil Phenyl-2 IBM Phenyl IBM Phenyl-NP IB-SIL Phenyl BD Inertsil Ph (Phenyl) Inertsil Ph-3 (Phenyl) Kinetex Phenyl-Hexyl Kinetex Biphenyl Kromasil Phenyl-Hexyl Luna Phenyl-Hexyl µBondapak Phenyl | Thermo Fisher Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Waters Corp. Waters Corp. Grace - Alltech Grace - Alltech Grace - Alltech Grace – Alltech Restek Corp. Grace - Alltech Grace – Jones Supelco Supelco Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher Phenomenex Shiseido Shiseido ES Industries Merck KgaA Higgins Analytical MicroSolv Tech. Corp. MicroSolv Tech. Corp. MicroSolv Tech. Corp. Nacalai Tesque, Inc. Nacalai Tesque, Inc. Diazem Spincotech Fortis Technologies Phenomenex Grace – Jones Sepax Technologies Advanced Materials Tech. Biochrom Labs, Inc. Biochrom Labs, Inc. Thermo Fisher Thermo Fisher Thermo Fisher Thermo Fisher IBM Instruments Inc. IBM Instruments Inc. Phenomenex GL Sciences GL Sciences Phenomenex Phenomenex Akzo Nobel Separations Phenomenex Waters Corp. |

| | | | |
|--------------|---|--|---|
| L 11 Cont | Phenyl groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | <p> Microsorb Phenyl NovaPak Phenyl NUCLEODUR Phenyl-Hexyl NUCLEODUR Sphinx RP NUCLEOSHELL Phenyl-Hexyl Nucleosil Phenyl Nucleosil Phenyl ec Optimisil MF Phenyl Peptica Phenyl series A,B,C Peerless Phenyl PerfectBond Ph PerfectBond Ph-H PerfectChrom 100 Phenyl PerfectChrom 100 Phenyl M PerfectSil 100 Phenyl-3 PerfectSil 120 Phenyl PerfectSil 120 Phenyl-M Pinnacle II Biphenyl Pinnacle II Phenyl Pinnacle DB Biphenyl Pinnacle DB Phenyl Platinum Phenyl Prodigy PH-3 ProntoSIL Phenyl Prevail Phenyl Purospher STAR Phenyl Pursuit DiPhenyl Pursuit XRs DiPhenyl Shodex Silica 5NPE SiliaChrom XDB1 Phenyl Speedcore Diphenyl Spheri-(5 and 10)-Phenyl Spherisorb Phenyl Sunniest PhE SunShell Phenyl SUPELCOSIL LC-DP SUPELCOSIL LC-3DP Synchronis Phenyl Synergi Polar-RP TSKgel Super-Phenyl Ultimate XB-Phenyl Ultisil XB-Phenyl Ultra II Biphenyl Ultra Phenyl Ultra II Aromax Ultra Techsphere 5 Phenyl Unison UK-Phenyl Uptisphere PH Viva Biphenyl Vydac 219MS Vydac 219TP Wakopak Wakosil 5Ph YMC-Pack Ph YMC-Triart Phenyl XBridge Phenyl XSelect CSH Phenyl-Hexyl XTerra Phenyl </p> | <p> Agilent Waters Corp. Macherey-Nagel Macherey-Nagel Macherey-Nagel Macherey-Nagel Macherey Nagel CVC Technologies Diazem Chromatopak MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik Restek Corp Restek Corp Restek Corp. Restek Corp Grace – Alltech Phenomenex Bischoff Chromatography Grace – Alltech Merck KgaA Agilent Agilent Shodex SiliCycle Inc Fortis Technologies PerkinElmer, Inc. Waters Corp. ChromaNik Technol. ChromaNik Technol. Supelco Supelco Thermo Fisher Phenomenex Tosoh Bioscience Welch Materials, Inc. Welch Materials, Inc. Restek Corp. Restek Corp. Restek Corp HPLC Technology Imtakt Interchim Restek Corp. Grace - Vydac Grace – Vydac Wako Pure Chemical Ind. YMC Co., Ltd. YMC Co., Ltd. Waters Corp. Waters Corp. Waters Corp. </p> |
|--------------|---|--|---|

| | | | |
|--------------|---|--|--|
| L 11 cont | Phenyl groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Zodiac Phenyl Zodiac Phenyl (1) Zodiac 120 Phenyl ZORBAX Eclipse XDB-Phenyl ZORBAX Eclipse Plus Phenyl-Hexyl ZORBAX Phenyl ZORBAX StableBond-Phenyl | Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Agilent Technologies Agilent Technologies Agilent Technologies Agilent Technologies |
| L12 | A strong anion-exchange packing made by chemically bonding a quaternary amine to a solid silica spherical core, 30 to 50 µm in diameter | Accell Plus QMA Anex Baker-10 SPE Quaternary Am Guard SAX Generik SAX Dionex IonPac AS4A-SC Hydrocell QA 1500 Hydrocell QA NP10 Pellicular SAX puriFlash SAX Zipax SAX Zodiac Prep SCX | Waters Corp. Transgenomic, Inc. J.T.Baker Chemical Co. Agilent Sepax Technologies Thermo Scientific BioChrom Labs, Inc. BioChrom Labs, Inc. Grace – Alltech Interchim DuPont Zodiac Life Sciences |
| L13 | Trimethylsilane chemically bonded to porous silica particles, 3 to 10 µm in diameter | Adsorbosphere TMS Adsorbosphere XL C1 Allsphere C1 APEX C1 BETASIL C1 Capcell C1 SG 120, 300 Capcell C1 UG 120 Chromegabond C1 Cosmosil TMS-MS DELTABOND Methyl Develosil TMS-UG C1 GP-C1 Grom-Sil TMS1 Grom-Sil TMS1 Hypersil SAS (C1) Kromasil C1 Peerless C1 PerfectBond C1 PerfectChrom 100 C1 PerfectSil 120 C1 Pinnacle II C1 Pinnacle DB C1 SiliaChrom XDB1 C1 Spherisorb C1 SUPELCOSIL LC-1 SynChropak RP1 TSKgel TMS-250 Ultra C1 Wakopak Wakosil 5TMS YMC-Pack TMS Zodiac C1 Zodiac C1(1) ZORBAX TMS | Grace - Alltech Grace - Alltech Grace - Alltech Grace - Jones Thermo Fisher Shiseido Shiseido ES Industries Nacalai Tesque, Inc. Thermo Electron Nomura Chemical Sepax Technologies Grace-Alltech Grace-Alltech Thermo Scientific Akzo Nobel Separations Chromatopak MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik Restek Corp. Restek Corp. SiliCycle Inc Waters Corp. Supelco Eichrom Technologies, Inc. Tosoh Bioscience Restek Corp. Wako Pure Chemical Ind. YMC Co., Ltd. Zodiac Life Sciences Zodiac Life Sciences Agilent Technologies |
| L14 | Silica gel having a chemically bonded strongly basic quaternary ammonium anion-exchange coating, 5 to 10 µm in diameter. | Adsorbosphere SAX Adsorbosphere XL SAX Allsphere SAX Chromegabond SAX HP-SAX | Grace - Alltech Grace - Alltech Grace - Alltech ES Industries Sepax Technologies |

| | | | |
|-------------|--|---|--|
| L14 cont | Silica gel having a chemically bonded, strongly basic quaternary ammonium anion-exchange coating, 5 to 10 µm in diameter. | Hypersil GOLD SAX Hypersil SAX IonoSpher A Macrosphere 300 SAX MetaSil SAX Nucleosil SB Partisil SAX Partisphere SAX PhenoSphere SAX Platinum SAX PerfectChrom 100 SAX SiliaChrom SAX Spherex SAX Spherisorb SAX SUPELCOSIL SAX1 SynChropak Q300 TSKgel QAE-2SW Uptisphere SAX Vydac 3021C Wakopak Wakosil 5SAX Zodiac SCX Zodiac SCX(1) ZORBAX SAX | Thermo Fisher Thermo Fisher Agilent Grace - Alltech Agilent Macherey-Nagel Hichrom Hichrom Phenomenex Grace – Alltech MZ Analysentechnik SiliCycle Inc Phenomenex Waters Corp. Supelco Eprogen, Inc. Tosoh Bioscience Interchim Grace – Vydac Wako Pure Chemical Ind. Zodiac Life Sciences Zodiac Life Sciences Agilent Technologies |
| L15 | Hexylsilane chemically bonded to totally porous silica particles, 3 to 10 µm in diameter | Allsphere C6 BETASIL C6 Chomegabond C6 Grom-Sil Hexyl-1 PerfectChrom 100 C6 PhenoSphere C6 Spherisorb C6 Zodiac C6 Zodiac C6(1) | Grace - Alltech Thermo Fisher ES Industries Grace-Alltech MZ Analysentechnik Phenomenex Waters Corp. Zodiac Life Sciences Zodiac Life Sciences |
| L16 | Dimethylsilane chemically bonded to porous silica particles, 5 to 10 µm in diameter | Adsorbil C2 Chromegabond C2 Diazem C8 DAC2 Maxil RP2 Nucleosil C2 Polygosil C2 Polygosil C2 60A Zodiac C2 Zodiac C2(1) | Grace - Alltech ES Industries Diazem Phenomenex Macherey-Nagel Macherey Nagel Macherey Nagel Zodiac Life Sciences Zodiac Life Sciences |
| L17 | Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the hydrogen form, 6 to 12 µm in diameter | Alltech OA-1000 Alltech OA-2000 Alltech IOA-1000 Alltech IOA-2000 Aminex Fast Acid Analysis Aminex HPX-87H Carbomix H-NP Fast Fruit Juice Hamilton HC-75H Hamilton PRP-X200 Hamilton PRP-X300 Hi-Plex H Hydrocell SP1500 Hydrocell SP NP 10 HyperREZ XP Carbohydrate H HyperREZ XP Organic Acids | Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech Grace - Alltech BIO-RAD Laboratories BIO-RAD Laboratories Sepax Technologies Waters Corp. Hamilton Co. Hamilton Co. Hamilton Co. Agilent BioChrom Labs, Inc. BioChrom Labs, Inc. Thermo Fisher Thermo Fisher |

| | | | |
|-------------|--|--|---|
| L17 cont | Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the hydrogen form, 6 to 12 µm in diameter | IC-Pak Cation IC-Pak Ion Exclusion ICSep COREGEL 64H ICSep COREGEL 87H1 ICSep COREGEL 87H3 ICSep COREGEL 107H ICSep ION300 ICSep ORH-801 Jordi Gel DVB Sulfonated SCX Jordi Sulfonated Polar Pac SCX MCI GEL CK08EH Nucleogel Sugar 810H Nucleogel ION 300 OA Polypore H PRP-X200 Rezex RHM-Monosaccharide Rezex ROA-Organic Acid Rezex RFQ-Fast Acid Shim-pack SCR-101H Shodex IC Y-521 Shodex RSpak KC-811 Shodex SUGAR SH1011 Shodex SUGAR SH1821 SiliaChrom IEC SC-H SUPELCOGEL C-610H SUPELCOGEL H Ultron PS-80H Wescan Anion Exclusion Zodiac Carb USP L17 Zodiac Carb 87H Zodiac Carb 67H Zodiac Carb 87H(1) | Waters Corp. Waters Corp. Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Jordi Labs LLC Jordi Labs LLC Mitsubishi Chem Corp Macherey-Nagel Macherey-Nagel PerkinElmer, Inc. Hamilton Phenomenex Phenomenex Phenomenex Shimadzu Shodex Shodex Shodex Shodex SiliCycle Supelco Supelco Shinwa Grace - Alltech Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences |
| L18 | Amino and cyano groups chemically bonded to porous silica particles, 3 to 10 µm in diameter | Adsorbosphere PAC Chromegabond A/CN Partisil 10 PAC Partisphere PAC | Grace - Alltech ES Industries Hichrom Hichrom |
| L19 | Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the calcium form, about 9 µm in diameter | Alltech carbohydrate Cation Exchange column Aminex Carbohydrate HPX-87C Benson BC-100 Benson BC-200 Carbomix Ca-NP CARBOsep CHO620 CarboSep CHO-820 CARBOsep COREGEL-87C CARBOsep L19 Hamilton HC-40 Hamilton HC-75 Ca Hi-Plex Ca Hi-Plex Ca USP HyperREZ XP Carbohydrate Ca HyperREZ XP Sugar Alcohols MCI GEL CK08EC Nucleogel Sugar Ca Nucleogel Sugar 810 Ca Rezex RCM-Monosaccharide Rezex RCU-USP Sugar Alcohols | Grace - Alltech BIO-RAD Laboratories No information available No information available Sepax Technologies Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Hamilton Co. Hamilton Co. Agilent Agilent Thermo Fisher Thermo Fisher Mitsubishi Chem Corp Macherey-Nagel Macherey-Nagel Phenomenex Phenomenex |

| | | | |
|-------------|---|---|--|
| L19 cont | Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the calcium form, about 9 µm in diameter | Shodex SUGAR SC1011 Shodex SUGAR SC1211 Shodex SUGAR SC1821 Shodex USPpak MN-431 SUPELCOGEL Ca Ultron PS-80C Zodiac Carb USP L19 Zodiac Carb 87C Zodiac Carb 820 Zodiac Carb 620 | Shodex Shodex Shodex Shodex Supelco Shinwa Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences |
| L20 | Dihydroxypropane groups chemically bonded to porous silica or hybrid particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | APEX Diol ACQUITY BEH200SEC BETASIL Diol BioSep-SEC-s2000 BioSep-SEC-s3000 BioSep-SEC-s4000 BioSuite 125, 250, 450 series Chromegabond D(diol) Chromolith DIOL Cosmosil Diol 120-II Cosmosil diol 300-II Fortis HILIC Diol HP-Diol Insulin HMWP Kromasil Diol LiChrosorb Diol LiChrospher Diol-100 Luna HILIC Macrosphere GPC 60,100,150 Macrosphere GPC-300,500 Macrosphere GPC-1000,4000 Nucleosil Diol Peerless Diol PerfectChrom 100 Diol Protein-Pak 60 Protein-Pak 125 ProteinPak 200 SW and 300SW Shodex KW402.5 Shodex KW403 Shodex KW404 Shodex KW405 Shodex PROTEIN KW-802.5 Shodex PROTEIN KW-803 Shodex PROTEIN KW-804 Spherex Diol SunSec Diol SUPELCOSIL LC-Diol SynChropak GPCPEP SynChropak GPC series 100, 300, 500, 1000, 4000 TSKgel QC-PAK GFC series TSKgel Super SW series TSKgel SuperSW mAb HR TSKgel SWxl series TSKgel SW series TSKgel UltraSW Aggregate Uptisphere OH (Diol) | Grace – Jones Waters Thermo Fisher Phenomenex Phenomenex Phenomenex Waters Corp. ES Industries Merck KgaA Nacalai Tesque, Inc. Nacalai Tesque, Inc. Fortis Sepax Technologies Waters Corp. Akzo Nobel Separations EM Sciences Merck KgaA Phenomenex Grace - Alltech Grace - Alltech Grace – Alltech Macherey-Nagel Chromatopak MZ Analysentechnik Waters Corp. Waters Corp. Waters Corp. Shodex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Phenomenex ChromaNik Technol. Supelco Eprogen, Inc. Eprogen, Inc. Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Interchim |

| | | | |
|-------------|---|--|---|
| L20 cont | Dihydroxypropane groups chemically bonded to porous silica or hybrid particles, 1.5 to 10 µm in diameter, or a monolithic silica rod. | Yarra SEC-2000 Yarra SEC-3000 Yarra SEC-4000 YMC-Pack Diol 60A, 120A, 200A, 300A YMC-Triart Diol-HILIC Zodiac diol Zodiac Diol (1) | Phenomenex Phenomenex Phenomenex YMC Co., Ltd. YMC Co., Ltd. Zodiac Life Sciences Zodiac Life Sciences |
| L21 | A rigid, spherical styrene-divinylbenzene copolymer, 3 to 30 µm in diameter | Hamilton PRP-1 Hamilton PRP-3 Hydrocell RP series Hydrocell RP NP series HyperREZ XP RP 100 Jordi Gel DVB Jordi Gel RP 500A MCI GEL CHP20/C04 MCI GEL CHP20/C10 Nucleogel RP Phenogel PLgel PLRP-S 100A PLRP-S 1000A PLRP-S 300A PLRP-S 4000A Polymer X RP-1 PolyRP-100 PolyRP-300 PolyRP-NP5 PolyRP-NP10 PRP-1 RoGel RPSep PRX-1 Shodex GPC series KF, K, KD, HFIP, LF, AT, UT Shodex RSpak DS-413 Shodex RSpak DS-613 Shodex RSpak RP18-413 Shodex RSpak RP18-415 Shodex RSpak RP18-613 SiliaChrom RPC Styragel HR 0.5, 1, 2, 3 and 4 Styragel HR 4E Styragel HR 5E TSKgel Hxl and Hhr series TSKgel SuperH series TSKgel SuperHZ series TSKgel SuperMultiporeHZ series | Hamilton Co. Hamilton Co. BioChrom Labs, Inc. BioChrom Labs, Inc. ThermoFisher Jordi Labs LLC Jordi Labs LLC Mitsubishi Chem Corp Mitsubishi Chem Corp Macherey-Nagel Phenomenex Phenomenex Agilent Agilent Agilent Agilent Phenomenex Sepax Technologies Sepax Technologies Sepax Technologies Sepax Technologies Hamilton Inc. Grace - Alltech Transgenomic, Inc. Shodex Shodex Shodex Shodex Shodex Shodex Shodex SiliCycle Inc Waters Corp. Waters Corp. Waters Corp. Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience |

| | | | |
|-----|--|--|--|
| | | Zodiac Gel PRX-1 Zodiac Gel PRX-2 | Zodiac Life Sciences Zodiac Life Sciences |
| L22 | A cation-exchange resin made of porous polystyrene gel with sulfonic acid groups, about 10 µm in size | Alltech Anion Exclusion CarboSep CH0620 CarboSep COREGEL 87C Generik SCX Hamilton PRP-X200 Hamilton PRP-X300 Hi-Plex H HyperREZ XP SCX IC-Pak Ion Exclusion ICSep COREGEL 64H ICSep COREGEL 87H1 ICSep COREGEL 87H3 ICSep COREGEL 107H ICSep ORH801 Dionex IonPac ICE-AS1 Dionex IonPac ICE-Borate Jordi Gel DVB Sulfonated SCX Jordi Sulfonated Polar Pac SCX Nucleogel SCX Proteomix SCX-POR Rezex ROA-Organic Acid Shodex CXpak P-421S Shodex IC Y-521 Shodex RSpak DC-613 Shodex RSpak KC-811 Shodex SUGAR KS-800 series Shodex SUGAR SC1011 Shodex SUGAR SC1211 Shodex SUGAR SC1821 Shodex SUGAR SH1011 Shodex SUGAR SH1821 Shodex SUGAR SP0810 Shodex SUGAR SZ5532 Shodex USPak MN-431 SiliaChrom IEC SC-M SUPELCOGEL C-610H SUPELCOGEL H TSKgel SCX Zodiac Carb 87H Zodiac Carb 87H(1) Zodiac Carb 64H Zodiac Carb 67H | Grace - Alltech Transgenomic, Inc. Transgenomic, Inc. Sepax Technologies Hamilton Co. Hamilton Co. Agilent Thermo Fisher Waters Corp. Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Thermo Scientific Thermo Scientific Jordi Labs LLC Jordi Labs LLC Macherey-Nagel Sepax Technologies Phenomenex Shodex SiliCycle Inc Supelco Supelco Tosoh Bioscience Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences |
| L23 | An anion-exchange resin made of porous polymethacrylate or polyacrylate gel with quaternary ammonium groups, 7 - 12 µm in size | Allsep BioSuite DEAE BioSuite Q-PEEK Cosmogel QA Discovery BIO PolyMA-WAX IC-Pak Anion MCI GEL CQA31S MetroSep Anion Dual 2 Nucleogel SAX Protein-Pak Q 8HR PRP-X500 Shodex IEC QA-825 Super-Sep IC Anion | Grace - Alltech Waters Corp. Waters Corp. Nacalai Tesque, Inc. Supelco Waters Corp. Mitsubishi Chem Corp Metrohm-Peak, Inc. Macherey-Nagel Waters Corp. Hamilton Co. Shodex Metrohm-Peak, Inc. |

| | | | |
|-----|--|---|---|
| | | TSKgel Q-STAT TSKgel DNA-STAT TSKgel SuperQ-5PW TSKgel BioAssist Q TSKgel IC-Anion-PW Zodiac IC Anion | Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Zodiac Life Sciences |
| L24 | Polyvinylalcohol chemically bonded to porous silica particles, 5 µm in diameter | YMC-Pack PVA-Sil | YMC Co., Ltd. |
| L25 | Packing having the capacity to separate compounds with a molecular weight range from 100-5000 (as determined by polyethylene oxide), applied to neutral, anionic, and cationic water-soluble polymers. A polymethacrylate resin base, cross-linked with polyhydroxylated ether (surface contained some residual carboxyl functional groups) was found suitable | HyperGel AP Macrosphere GPC 60 MCI GEL CQP06 PolySep-GFC-P1000 PolySep-GFC-P2000 Shodex OHpak SB-802HQ Shodex OHpak SB-802.5HQ Shodex SB402.5 TSKgel G1000PW TSKgel G2000PW TSKgel G2500PW TSKgel G2500PWxl Ultrahydrogel DP, +120 | Thermo Fisher Grace – Alltech Mitsubishi Chem Corp Phenomenex Phenomenex Shodex Shodex Shodex Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Waters Corp. |
| L26 | Butyl silane chemically bonded to totally porous silica particles, 1.5 to 10 µm in diameter | Accucore 150-C4 ACE C4-300 ACE C4 ACE Excel C4 Acquity UPLC BEH300 C4 Aeris WIDEPORE C4 Amplus C4-30 Aquapore BU-300 BetaBasic 4 BioBasic 4 Bio-C4 Chromegabond C4 Cosmosil C4-MS Cosmosil C4-AR-300 DAISO C4 – BIO DAISO C4 - P Delta-Pak C4 FortisBIO C4 Genesis 300 C4 GP-C4 Grom-Sapphire C4 Grom-Sil Butyl 1 Grom-Sil Butyl 2 Haisil 300 C4 HALO Protein C4 Hyperprep PEP 300 C4 Hypersil GOLD C4 HyPURITY C4 Jupiter 300 C4 Kromasil C4 Macrosphere 300 C4 MicroSorb C4 NUCLEODUR 300 C4 ec Nucleosil C4 Nucleosil C4 MPN | Thermo Fisher Advanced Chrom. Tech. Advanced Chrom. Tech. Advanced Chrom. Tech. Waters Corp. Phenomenex ChromaNik Technol. Perkinelmer, Inc. Thermo Fisher Thermo Fisher Sepax Technologies ES Industries Nacalai Tesque, Inc. Nacalai Tesque, Inc. Daiso Fine Chem USA, Inc. Daiso Fine Chem USA, Inc. Waters Associates Fortis Technologies Grace – Jones Sepax Technologies Grace – Alltech Grace – Alltech Grace – Alltech Higgins Analytical Advanced Materials Tech. Thermo Fisher Thermo Fisher Thermo Fisher Phenomenex Akzo Nobel Separations Grace – Alltech Agilent Macherey-Nagel Macherey-Nagel Macherey-Nagel |

| | | | |
|-------------|---|---|--|
| L26 cont | Butyl silane chemically bonded to totally porous silica particles, 1.5 to 10 µm in diameter | <p>Optimasil MF C4 Optimasil LP C4 Orbit 100 C4 Peerless C4 PerfectChrom 100 C4 PerfectSil 120 C4 PerfectSil 300 C4 Pinnacle II C4 Pinnacle DB C4 Platinum 300 C4 Polygoprep C4 Proteonavi PrimeSphere C4 ProntoSIL C4 ProSphere 300 C4 ProSphere HP C4 Shodex Silica 5C4 SiliaChrom XDB1 C4 Symmetry300 C4 SynChropak RP4, RP4-1000, RP4-4000 SUPELCOSIL LC-304 TSKgel Protein C4-300 Ultra C4 Uptisphere C4 Uptisphere X-Serie C4 Uptisphere 300A WC4 Uptisphere 300A WD4 Uptisphere 300A WT4 Viva C4 Vydac 214ATP Vydac 214MS Vydac 214TP Vydac C4 Wakopak Wakosil 5C4 Wakopak Wakosil 5C4-200 XBridge BEH300 C4 YMC-Pack C4 (Butyl) YMC-Pack Pro C4 YMC-Pack Protein-RP Zodiac C4 Zodiac C4(1) Zodiac 120 C4</p> | <p>CVC Technologies CVC Technologies MZ Analysentechnik Chromatopak MZ Analysentechnik MZ Analysentechnik MZ Analysentechnik Restek Corp Restek Corp. Grace – Alltech Macherey-Nagel Shiseido Phenomenex Bischoff Chromatography Grace - Alltech Grace – Alltech Shodex SiliCycle Inc Waters Corp. Eprogen, Inc. Supelco Tosoh Bioscience Restek Corp. Interchim Interchim Interchim Interchim Interchim Restek corp. Grace - Vydac Grace - Vydac Grace - Vydac Grace – Vydac Wako Pure Chemical Ind. Wako Pure Chemical Ind. Waters Corp. YMC Co., Ltd. YMC Co., Ltd. YMC Co., Ltd. Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences</p> |
| L27 | Porous silica particles, 30 to 50 µm in diameter | <p>Bondsil Silica Davisil 632, 642, 652 Discovery DSC-Si Generik Silica HyperPrep Silica ISOLUTE Silica Nucleodur Pelliguard LC-Si PerfectBond Si Porasil POLYGOPREP SiOH puriFlash Silica Septra Silica Solvecon Supelclean LC-Si</p> | <p>Agilent No information available Supelco Sepax Technologies Thermo Electron Int. Sorbent Technology Macherey-Nagel Supelco MZ Analysentechnik Waters Corp. Macherey-Nagel Interchim Whatman Inc. Phenomenex Supelco</p> |

| | | | |
|-----|--|---|--|
| | | Wakopak Wakosil 40SIL YMC-Pack Silica (S50) Zodiac Prep silica | Wako Pure Chemical Ind. YMC Co., Ltd. Zodiac Life Sciences |
| L28 | A multifunctional support, which consists of a high purity, 100 Å, spherical silica substrate that has been bonded with anionic exchanger, amine functionally in addition to a conventional reversed phase C ₈ functionality | Alltech mixed mode C8/anion Generik C8/Amino ProTec C8 Uptisphere MM3 Uptisphere MM4 Zodiac C8/Amino | Grace – Alltech Sepax Technologies ES Industries Interchim Interchim Zodiac Life Sciences |
| L29 | Gamma alumina, reverse-phase, low carbon percentage by weight, alumina-based polybutadiene spherical particles, 5 µm in diameter with a pore volume of 80 Å units | Gammabond ARP-1 Gammabond Alumina Potency | ES Industries ES Industries |
| L30 | Ethyl silane chemically bonded to totally porous silica particles, 3 to 10 µm in diameter | APEX Prepsil C2 Chromegabond C2-E GP-C2 Maxsil RP2 Nucleosil C2 Zodiac Sil C2 | Grace - Jones ES Industries Sepax Technologies Phenomenex Macherey-Nagel Zodiac Life Sciences |
| L31 | A hydroxide-selective, strong anion-exchange resin-quaternary amine bonded on latex particles attached to a core of 8.5-µm macroporous particles having a pore size of 2000 Å units and consisting of ethylvinylbenzene cross-linked with 55% divinylbenzene | Dionex Ion Pac AS 10 Dionex IonPac AS11-HC Dionex IonPac AS16 MCI Gel SCA04 | Thermo Scientific Thermo Scientific Thermo Scientific Mitsubishi |
| L32 | A chiral ligand-exchange resin packing-L-proline copper complex covalently bonded to irregularly shaped silica particles, 5 to 10 µm in diameter | Astec CLC-D Astec CLC-L CHIRALCEL WH Chiral+Si 100 L-ProCu ChiralPro+Si 100 Polyol MCI GEL CRS10W MCI GEL CRS15W Nucleosil Chiral-1 | Supelco Supelco Daicel Chem. Ind., Ltd. Serva Biochemicals Serva Biochemicals Mitsubishi Chem Corp Mitsubishi Chem Corp Macherey-Nagel |
| L33 | Packing having the capacity to separate dextrans by molecular size over a range of 4,000 to 500,000 Da. It is spherical, silica-based, and processed to provide pH stability | BioBasic SEC 120 BioBasic SEC 300 BioBasic SEC 1000 BioSep-SEC-s2000 BioSep-SEC-s3000 BioSep-SEC-s4000 Macrosphere 150 Δ Nanofilm SEC-150 Nanofilm SEC-250 Nanofilm SEC-500 SRT SEC-100 SRT SEC-150 SRT SEC-300 SRT SEC-500 SRT SEC-1000 Shodex PROTEIN KW-800 series Shodex KW400 series SynChropak GPC Linear SynChropak GPC series 100, 300, 500, 1000, 4000 | Thermo Scientific Thermo Scientific Thermo Scientific Phenomenex Phenomenex Phenomenex Grace – Alltech Sepax Technologies Sepax Technologies Sepax Technologies Sepax Technologies Sepax Technologies Sepax Technologies Sepax Technologies Sepax Technologies Sepax Technologies Shodex Shodex Eprogen, Inc. Eprogen, Inc. |

| | | | |
|----------|--|---|---|
| L33 cont | Packing having the capacity to separate dextrans by molecular size over a range of 4,000 to 500,000 Da. It is spherical, silica-based, and processed to provide pH stability | TSKgel SuperSW, SWxl, QC-PAK GFC, and SW series TSKgel SuperSW mAb HR TSKgel UltraSW Aggregate Wakopak Wakosil 5Diol-60 Wakopak Wakosil 5Diol-120 Wakopak Wakosil 5Diol-200 Wakopak Wakosil 5Diol-300 Yarra SEC-2000 Yarra SEC-3000 Yarra SEC-4000 YMC-Pack Diol Zodiac Gel SEC 100 Zodiac Gel SEC 150 Zodiac Gel SEC 300 Zodiac Gel SEC 500 Zodiac Gel SEC 1000 | Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. Phenomenex Phenomenex Phenomenex YMC Co., Ltd. Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences |
| L34 | Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the lead form, 7 to 9 µm in diameter | Aminex Fast Carbohydrate Benson BC-100 Pb ²⁺ CARBOsep COREGEL-87P CARBOsep CHO682 Hamilton HC-75 Pb ²⁺ Hi-Plex Pb HyperREZ XP Carbohydrate Pb Li-High Nucleogel Sugar Pb Rezex RPM monosaccharide Shodex SUGAR SP0810 SUPELCOGEL Pb Zodiac Carb 87P | Bio Rad No information available Transgenomic, Inc. Transgenomic, Inc. Hamilton Agilent Thermo Fisher Beckman Macherey-Nagel Phenomenex Shodex Supelco Zodiac Life Sciences |
| L35 | A zirconium-stabilized spherical silica packing with a hydrophilic (diol-type) molecular monolayer bonded phase having a pore size of 150 Å. | BioSep-SEC-s2000 Yarra SEC-2000 ZORBAX GF-250 ZORBAX GF-450 | Phenomenex Phenomenex Agilent Technologies Agilent Technologies |
| L36 | A 3,5-dinitrobenzoyl derivative of L-phenylglycine covalently bonded to 5-µm aminopropyl silica | Nucleosil Chiral-3 | Macherey-Nagel |
| L37 | Packing having the capacity to separate proteins by molecular size over a range of 2,000 to 40,000 Da. It is a polymethacrylate gel | MCI GEL CQP30 Ultrahydrogel 250 PolySep-GFC-P3000 Shodex OHpak SB-803 HQ Shodex SB403-4E TSKgel G3000PWxl-CP TSKgel G3000PWxl, G3000PW | Mitsubishi Chem Corp Waters Phenomenex Shodex Shodex Tosoh Bioscience Tosoh Bioscience |
| L38 | A methacrylate-based size-exclusion packing for water-soluble samples | MCI GEL CQP10 MCI GEL CQP30 PolySep-GFC-P1000 Shodex SB400 series Shodex OHpak SB-800HQ series TSKgel PW, PWxl, PWxl-CP, Alpha, and SuperAW series TSKgel SuperMultiporePW Ultrahydrogel series | Mitsubishi Chem Corp Mitsubishi Chem Corp Phenomenex Shodex Shodex Tosoh Bioscience Tosoh Bioscience Waters |
| L39 | A hydrophilic polyhydroxymethacrylate gel of totally porous spherical resin | MCI GEL CMG20/C04 MCI GEL CMG20/C10 PolySep-GFC-P Shodex SB400 series | Mitsubishi Chem Corp Mitsubishi Chem Corp Phenomenex Shodex |

| | | | |
|-----|--|---|---|
| | | Shodex OHPak SB-800HQ series Shodex ODP2 HP Shodex RSpak DM-614 TSKgel PW, PWxl, PWxl-CP , Alpha and SuperAW series Ultrahydrogel series | Shodex Shodex Shodex Tosoh Bioscience Waters Corp. |
| L40 | Cellulose tris-3,5-dimethylphenylcarbamate coated porous silica particles, 5 µm to 20 µm in diameter | Astec Cellulose DMP CHIRALCEL OD CHIRALCEL OD-H Kromasil CelluCoat Lux Cellulose-1 Nucleocel Delta Nucleocel Delta S SiliaChrom Chiral Cellulose T-DPC YMC Chiral Cellulose-C | Supelco Daicel Daicel Akzo Nobel Separations Phenomenex Macherey-Nagel Macherey-Nagel SiliCycle Inc YMC Co., Ltd. |
| L41 | Immobilized α ₁ -acid glycoprotein on spherical silica particles, 5 µm in diameter | Chiral-AGP Chiralpak AGP | Chiral Technologies Chiral Technologies |
| L42 | Octylsilane and octadecylsilane groups chemically bonded to porous silica particles, 5 µm in diameter | Chromegabond PSC HiChrom RPB SiliaChrom C18/C8 | ES Industries Hichrom Ltd. SiliCycle |
| L43 | Pentafluorophenyl groups chemically bonded to silica particles by a propyl spacer, 1.5 to 10 µm in diameter | Accucore PFP ACQUITY UPLC CSH Fluoro-Phenyl ACQUITY UPLC HSS PFP Allure PFP Propyl Ascentis Express F5 Capcell Core PFP Cosmosil 5PFP Curosil PFP Discovery HS F5 HALO PFP Hypersil GOLD PFP Kinetex PFP Luna PFP(2) NUCLEODUR PFP NUCLEOSHELL PFP Pinnacle DB PFP Propyl Pursuit PFP SiliaChrom PFP Speedcore PFP Sunnest PFP SunShell PFP TAC 1 Ultra II PFP Propyl Ultra PFP Viva PFP Propyl XSelect CSH Fluoro-Phenyl XSELECT HSS PFP YMC-Triart PFP Zodiac PFP | Thermo Fisher Waters Corp. Waters Corp. Restek Corp. Supelco Shiseido Nacalai Tesque, Inc. Phenomenex Supelco Adv. Materials Tech. Thermo Fisher Phenomenex Phenomenex Macherey-Nagel Macherey-Nagel Restek corp. Agilent SiliCycle Fortis Technologies ChromaNik Technol. ChromaNik Technol. Whatman Restek Corp. Restek Corp. Restek Corp. Waters Corp. Waters Corp. YMC Co., Ltd. Zodiac Life Sciences |
| L44 | A multifunctional support, which consists of a high purity, 60 Å, spherical silica substrate that has been bonded with a cationic exchanger, sulfonic acid functionality in addition to a convention reversed phase C ₈ functionality | Chromegabond RP-SCX Generik C8/SCX puriFlash MM1 (RP/SCX) Zodiac C8/SCX | ES Industries Sepax Technologies Interchim Zodiac Life Sciences |

| | | | |
|-----|---|--|---|
| L45 | Beta cyclodextrin, R,S-hydroxypropyl ether derivative, bonded to porous silica particles, 5 to 10 µm in diameter | ChiraDex ChiraDex HR Chiral CD-Ph Astec CYCLOBOND I 2000 RSP Nucleodex Beta OH Nucleodex Beta PM Shodex ORpak CDBS-453 Ultron ES-CD Ultron ES-PhCD Zodiac Beta Dex Chiral | Merck KgaA Merck KgaA Shiseido Supelco Macherey-Nagel Macherey-Nagel Shodex Shinwa Shinwa Zodiac Life Sciences |
| L46 | Polystyrene/divinylbenzene substrate agglomerated with quaternary amine functionalized latex beads, about 9 µm to 11 µm in diameter | Dionex CarboPac PA1 Dionex CarboPac10 OmniPac PAX 100 SunShell PFP Transgenomic AN1 | Thermo Scientific Thermo Scientific Thermo Scientific ChromaNik Technol. Transgenomic |
| L47 | High capacity anion-exchange microporous substrate, fully functionalized with a trimethylamine group, 8 µm in diameter | ALC-525 CarboPac MA1 Hamilton PRP-X100 Hamilton PRP-X110 Hamilton RCX-10 Hamilton RCX-30 MCI GEL CQA35S | Antec Leyden Dionex Corp. Hamilton Hamilton Hamilton Hamilton Mitsubishi Chem Corp |
| L48 | Sulfonated, cross-linked polystyrene with an outer layer of submicron, porous, anion-exchange microbeads, 5 to 15 µm in diameter | Dionex IonPac AG5 Dionex IonPac AG5A Dionex IonPac AG7 Dionex IonPac AS5 Dionex IonPac AS5A Dionex IonPac AS7 | Thermo Scientific Thermo Scientific Thermo Scientific Thermo Scientific Thermo Scientific Thermo Scientific |
| L49 | A reversed-phase packing made by coating a thin layer of polybutadiene on to spherical porous zirconia particles, 3 to 10 µm in diameter | ZirChrom PBD Discovery Zr-PBD | ZirChrom Separations, Inc. Supelco |
| L50 | Multifunction resin with reverse-phase retention and strong anion-exchange functionalities. The resin consists of ethylvinylbenzene, 55% cross-linked with divinylbenzene copolymer, 3 to 15 µm in diameter, and a surface area of not less than 350 m ² per g. Substrate is coated with quaternary ammonium functionalized latex particles consisting of styrene cross-linked with divinylbenzene | OmniPac PAX-500 Proteomix SAX-POR Zodiac Protein SAX | Thermo Scientific Sepax Technologies Zodiac Life Sciences |
| L51 | Amylose tris-3,5-dimethylphenylcarbamate-coated, porous, spherical, silica particles, 5 to 10 µm in diameter | Chiralpak AD Chiralpak AD-H Kromasil Amycoat Nucleocel Alpha SiliaChrom Chiral Amylose T-DPC YMC Chiral Amylose-C | Chiral Technologies, Inc. Chiral Technologies, Inc. Akzo Nobel Separations Macherey-Nagel SiliCycle Inc YMC Co., Ltd. |
| L52 | A strong cation exchange resin made of porous silica with sulfopropyl groups, 5 to 10 µm in diameter | BioBasic SCX IonoSpher C SUPELCOSIL LC-SCX TSKgel IC-Cation-SW TSKgel SP-2SW Uptisphere SCX | Thermo Fisher Agilent Supelco Tosoh Bioscience Tosoh Bioscience Interchim |

| | | | |
|-----|---|---|---|
| L53 | Weak cation-exchange resin consisting of ethylvinylbenzene, 55% cross-linked with divinylbenzene copolymer, 3 to 15 μm diameter. Substrate is surface grafted with carboxylic acid and/or phosphoric acid functionalized monomers. Capacity not less than 500 $\mu\text{Eq}/\text{column}$ | Dionex IonPac CS14 | Thermo Scientific |
| L54 | A size exclusion medium made of covalent bonding of dextran to highly cross-linked porous agarose beads, about 13 μm in diameter. | Superdex peptide HR 10/30 | Amersham Pharmacia Biotech |
| L55 | A strong cation exchange resin made of porous silica coated with polybutadiene-maleic acid copolymer, about 5 μm in diameter | IC-Pak C M/D Universal Cation Universal Cation HR | Waters Corp. Grace - Alltech Grace - Alltech |
| L56 | Propyl silane chemically bonded to totally porous silica particles, 3 to 10 μm in diameter | ZORBAX StableBond C3 | Agilent Technologies |
| L57 | A chiral-recognition protein, ovomucoid, chemically bonded to silica particles, about 5 μm in diameter, with a pore size of 120 \AA . | Ultron ES-OVM Ultron ES-OVM | Agilent Shinwa |
| L58 | Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the sodium form, about 6 to 30 μm diameter | Aminex HPX-87N Carbomix Na-NP CARBOsep Coregel 87N CARBOsep CHO611 CARBOsep CHO611OH Hi-Plex Na HyperREZ Carbohydrate XP Na MCI GEL CK08S MCI GEL CK08E MCI GEL CK04S MCI GEL CK02A NUCLEOGEL Sugar Na Rezex RNM-Carbohydrate Shodex CXpak P-421S Shodex RSpak DC-613 Shodex SUGAR KS-801 Shodex SUGAR KS-802 Shodex SUGAR KS-803 Shodex SUGAR KS-804 Shodex SUGAR KS-805 Shodex SUGAR KS-806 Shodex SUGAR KS-807 TSKgel SCX(Na^+) Ultron PS-80N Zodiac Carb 87N | BioRad Laboratories Sepax Technologies Transgenomic, Inc. Transgenomic, Inc. Transgenomic, Inc. Agilent Thermo Fisher Mitsubishi Chem Corp Mitsubishi Chem Corp Mitsubishi Chem Corp Mitsubishi Chem Corp Macherey-Nagel Phenomenex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Shodex Tosoh Bioscience Shinwa Zodiac Life Sciences |
| L59 | Packing for the size-exclusion separations of proteins (separation by molecular weight) over the range of 5 to 7000 kDa. The packing is spherical 1.5 - 10 μm , silica or hybrid packing with a hydrophilic coating. | ACQUITY BEH200 SEC BioSep-SEC-s2000 BioSep-SEC-s3000 BioSep-SEC-s4000 Biosuite 125 Biosuite 250 Biosuite 450 Discovery BIO GFC 100 Discovery BIO GFC 150 | Waters Phenomenex Phenomenex Phenomenex Waters Waters Waters Supelco Supelco |

| | | | |
|-------------|---|--|---|
| L59 cont | Packing for the size-exclusion separations of proteins (separation by molecular weight) over the range of 5 to 7000 kDa. The packing is spherical 1.5 - 10 µm, silica or hybrid packing with a hydrophilic coating. | Discovery BIO GFC 300 Discovery BIO GFC 500 Discovery BIO GFC 1000 Discovery BIO GFC 2000 Nanofilm SEC-150 Nanofilm SEC-250 Nanofilm SEC-500 Protein-Pak 60 Protein-Pak 300SW Shodex KW400 series Shodex PROTEIN KW-800 series SRT SEC-100 SRT SEC-150 SRT SEC-300 SRT SEC-500 SRT SEC-1000 TSKgel G2000SW, G3000SW, G4000SW, G2000SWxl, G3000SWxl, G4000SWxl, SuperSW2000, and SuperSW3000 TSKgel SuperSW mAb HR TSKgel UltraSW Aggregate Yarra SEC-2000 Yarra SEC-3000 Yarra SEC-4000 YMC-Pack Diol Zodiac Gel SEC 100 Zodiac Gel SEC 150 Zodiac Gel SEC 300 Zodiac Gel SEC 500 Zodiac Gel SEC 1000 | Supelco Supelco Supelco Supelco Sepax Technologies Sepax Technologies Sepax Technologies Waters Waters Shodex Shodex Sepax Technologies Sepax Technologies Sepax Technologies Sepax Technologies Sepax Technologies Tosoh Bioscience Tosoh Bioscience Tosoh Bioscience Phenomenex Phenomenex Phenomenex YMC Co., Ltd. Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences Zodiac Life Sciences |
| L60 | Spherical, porous silica gel, 10 µm or less in diameter, the surface of which has been covalently modified with alkyl amide groups and endcapped | Acclaim Polar Advantage Acclaim Polar Advantage II (PA2) Accucore Polar Premium Ascentis RP-Amide Ascentis Express RP-Amide Discovery RP-Amide C16 HALO RP-Amide HyPURITY ADVANCE Nucleodur PolarTec Nucleosil C18 Nautilus Polaris Amide-C18 Prism RP Prism RPN SUPELCOSIL LC-ABZ SUPELCOSIL ABZ+Plus Uptisphere PLP ZORBAX Bonus-RP Zodiac Amide | Thermo Scientific Thermo Scientific Thermo Scientific Supelco Supelco Supelco Advanced Materials Tech. Thermo Fisher Macherey-Nagel Macherey-Nagel Agilent Thermo Scientific Thermo Scientific Supelco Supelco Interchim Agilent Zodiac Life Sciences |

| | | | |
|-----|--|--|--|
| L61 | A hydroxide-selective, strong anion-exchange resin consisting of a highly cross-linked core of 13 µm microporous particles having a pore size less than 10 Å units and consisting of ethylvinylbenzene cross-linked with 55% divinylbenzene with a latex coating composed of 85 nm diameter microbeads bonded with alkanol quarternary ammonium ions (6%). | Dionex Ion Pac AG-11 Dionex Ion Pac AG11-HC Dionex IonPac AS11 | Thermo Scientific Thermo Scientific Thermo Scientific |
| L62 | C30 silane bonded phase on a fully porous spherical silica, 3 to 15 µm in diameter. | Acclaim C30 Accucore C30 Develosil C30 Develosil C30-UG Develosil RP-Aqueous Develosil Combi-RP Develosil RP-Aqueous-AR ProntoSIL C30 ProntoSIL C30 EC Wakopak navi C30-5 YMC Carotenoid Zodiac C30 Zodiac 120 C30 | Thermo Scientific Thermo Scientific Nomura Chemicals Nomura Chemicals Nomura Chemicals Nomura Chemicals Nomura Chemicals Nomura Chemicals Bischoff Bischoff Wako Pure Chemical Ind. YMC Co., Ltd. Zodiac Life Sciences Zodiac Life Sciences |
| L63 | Glycopeptide teicoplanin linked through multiple covalent bonds to a 100 Å units spherical silica | Astec CHIROBIOTIC T Astec CHIROBIOTIC T2 Astec CHIROBIOTIC TAG | Supelco Supelco Supelco |
| L64 | Strongly basic anion exchange resin consisting of 8% crosslinked styrene divinylbenzene copolymer with a quaternary ammonium group in the chloride form, 45 to 180 µm in diameter | AG 1-X8 | BioRad Laboratories |
| L65 | Strongly acidic cation exchange resin consisting of 8% sulfonated crosslinked styrene divinylbenzene copolymer with a sulfonic acid group in the hydrogen form, 63 to 250 µm in diameter | AG 50W-X2 | BioRad Laboratories |
| L66 | A crown ether coated on a 5 µm particle size silica gel substrate. The active site is (S) -18-crown-6-ether | Crownpak CR (+) | Chiraltech |
| L67 | Porous vinyl alcohol copolymer with a C18 alkyl group attached to the hydroxyl group of the polymer, 2 to 10 µm in diameter. | apHera C18 Asahipak ODP-40 Asahipak ODP-50 Shodex ET-RP1 | Supelco Shodex Shodex Shodex |
| L68 | Spherical, porous silica, 10 µm or less in diameter, the surface of which has been covalently modified with alkyl amide groups and not endcapped | ACQUITY UPLC Amide BEH Glycan SUPLEX pKb-100 TSKgel Amide-80 Ultra IBD Ultra II IBD Xbridge Amide BEH Glycan | Waters Supelco Tosoh Bioscience Restek Corp. Restek Corp. Waters |
| L69 | Ethylvinylbenzene/divinylbenzene substrate agglomerated with quaternary amine functionalized 130 nm latex beads, about 6.5 µm in diameter. | Dionex CarboPac PA20 | Thermo Scientific |
| L70 | Cellulose tris(phenyl carbamate) coated on 5 µm silica | Chiralcel OC-H | Daicel |

| | | | |
|-----|---|---|--|
| L71 | A rigid, spherical polymetacrylate, 4 to 6 μm in diameter | Shodex RSpak DE-213 Shodex RSpak DE-413 Shodex RSpak DE-613 | Shodex Shodex Shodex |
| L72 | (S)-phenylglycine and 3,5-dinitroaniline urea linkage covalently bonded to silica | Chirex 3012 Sumichiral OA-3300 S | Phenomenex Sumika |
| L73 | A rigid, spherical polydivinylbenzene particle, 5 to 10 μm in diameter | Jordi-Gel DVB | Jordi Labs LLC |
| L74 | A strong anion-exchange resin consisting of a highly cross-linked core of 7- μm macroporous particles having a 100 Angstroms average pore size and consisting of ethylvinylbenzene cross-linked with 55% divinylbenzene and an anion-exchange layer grafted to the surface, which is functionalized with alkyl quaternary ammonium ions. | Dionex IonPac AS14A | Thermo Scientific |
| L75 | A chiral-recognition protein, bovine serum albumin (BSA), chemically bonded to silica particles, about 7 μm in diameter, with a pore size of 300 Angstroms | Resolvosil BSA | Macherey-Nagel |
| L76 | Silica based weak cation-exchange material, 5 μm in diameter. Substrate is surface polymerized polybutadiene-maleic acid to provide carboxylic acid functionalities. Capacity not less than 29 $\mu\text{Eq}/\text{column}$ | Dionex IonPac SCS-1 Metrosep C4-250 | Thermo Scientific Metrohm |
| L77 | Weak cation-exchange resin consisting of ethylvinylbenzene, 55% cross-linked with divinylbenzene copolymer, 6 to 9 μm diameter. Substrate is surface grafted with carboxylic acid functionalized groups. Capacity not less than 500 $\mu\text{Eq}/\text{column}$ (4 mm x 25 cm) | Dionex IonPac CS17 | Thermo Scientific |
| L78 | A silane ligand that consists of both reversed-phase (an alkyl chain longer than C8) and anion-exchange (primary, secondary, tertiary, or quaternary amino groups) functional groups chemically bonded to porous or non-porous or ceramic micro-particles, 1.0 to 50 μm in diameter or a monolithic rod | Acclaim Mixed-Mode WAX-1 Acclaim Surfactant Plus Upti-Prep MM3 Upti-Prep MM4 | Thermo Scientific Thermo Scientific Interchim Interchim |
| L79 | A chiral-recognition protein, human serum albumin (HSA), chemically bonded to silica particles, about 5 μm in diameter. | CHIRALPAK HSA | Chiral Technologies |
| L80 | Cellulose tris(4-methylbenzoate)-coated, porous, spherical, silica particles, 5 μm in diameter | Chiralcel OJ Chiralcel OJ-H Chiralcel OJ-3 Lux Cellulose-3 | Daicel/Chiral Technologies Daicel/Chiral Technologies Daicel/Chiral Technologies Phenomenex |

| | | | |
|-----|---|---|---|
| L81 | A hydroxide-selective, strong anion-exchange resin consisting of a highly cross-linked core of 9 µm porous particles having a pore size of 2000 Angstroms units and consisting of ethylvinylbenzene cross-linked with 55% divinylbenzene with a latex coating composed of 70 nm diameter microbeads (6% crosslinked) bonded with alkanol quaternary ammonium ions | Dionex IonPac AS11-HC | Thermo Fisher |
| L82 | Polyamine chemically bonded to cross-linked polyvinyl alcohol polymer, 4 - 5 µm in diameter | apHera NH2 Amino Asahipak NH2P-40 Asahipak NH2P-50 | Supelco Shodex Shodex |
| L83 | A hydroxide-selective, strong anion-exchange resin-quaternary amine bonded on latex particles attached to a core of 10.5 µm microporous particles having a pore size of 10 Angstroms and consisting of ethylvinylbenzene cross-linked with 55% divinylbenzene. | Dionex IonPac AS17-C Dionex IonPac AG17-C | Thermo Fisher Thermo Fisher |
| L84 | Weak cation-exchange resin consisting of ethylvinylbenzene, 55% cross-linked with divinylbenzene copolymer, 5 µm diameter. Substrate is surface grafted with carboxylic acid functionalized groups. Capacity not less than 8400 µEq.column (5 mm x 25 cm). | Dionex IonPac CS16 Dionex IonPac CG16 | Thermo Fisher Thermo Fisher |
| L85 | A silane ligand that consists of both reversed-phase (an alkyl chain longer than C8) and weak cation-exchange (carboxyl groups) functional groups chemically bonded to porous or non-porous particles, 1.0 to 50 µm in diameter | Acclaim Mixed-Mode WCX-1 | Thermo Scientific |
| L86 | A 5 µm fused core particle with a highly polar ligand possessing 5 hydroxyl groups tethered to the silica gel outer layer | Ascentis Express OH5 | Supelco |
| L## | (Dalteparin Sodium, Anion-exchange Dowex 1X8) – Strongly basic (type I) anion exchange resin in the chloride form | Dowex 1X8 | Supelco |
| L## | (Dalteparin Sodium, Cation-exchange Dowex 50WX2) – Strong acidic cation exchange resin in the H ⁺ form | Dowex 50WX2 | Supelco |
| L## | (Ethylhexyl triazone, FluoFix) – Fluorocarbon chains chemically bonded to 5 µm spherical silica particles | Wakopak FluoFix-II 120E Wakopak FluoFix 120E Wakopak FluoFix 120N | Wako Pure Chemical Ind. Wako Pure Chemical Ind. Wako Pure Chemical Ind. |
| L## | (Octreotide Acetate, Synergi Max-RP) – Dodecyl silane chemically bonded to porous silica particles, 1.5 to 10 µm in diameter | Synergi Max-RP | Phenomenex |

| | | | |
|-----|---|--|--|
| L## | (Lanatoprost, Chiracel OD-R) – Cellulose tris(3,5-dimethylphenylcarbamate) coated on 10 µm silica gel particles | Chiracel OD-R Lux Cellulose-1 | Chiracel Phenomenex |
| L## | (Polyethylene Glycol 3350, TSKgel G-Oligo-PW) – Packing having the capacity to separate compounds with a molecular weight range from 100 – 3000 (as determined by polyethylene oxide), applied to neutral and anionic water-soluble polymers. A polymethacrylate resin base, cross-linked with polyhydroxylate ether (surface contains some residual cationic functional groups). | TSKgel G-Oligo-PW TSKgel SuperOligoPW | Tosoh Tosoh |
| L## | (Polyethylene Glycol 3350, Aquagel OH 40) – Packing having the capacity to separate compounds with a molecular weight range from 10,000 to 200,000 g/mol (as determined by polyethylene oxide), applied to neutral, anionic, and cationic water-soluble polymers, composed of a rigid macroporous material with a hydrophilic surface | Aquagel OH 40 | Agilent |
| L## | Amylose tris-(3,5-dimethylphenylcarbamate), immobilized on porous, spherical, silica particles, 3 to 5 µm in diameter | Chiralpak IA Chiralpak IA-3 | Chiral Technologies Chiral Technologies |
| L## | (Felodipine Extended-release Tablets, COSMOSIL PYE) – Pyrenyl groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter, or a monolithic rod | COSMOSIL PYE | Nacalai Tesque, Inc. |
| L## | (Atomoxetine Hydrochloride, Chiralpak IC) – Cellulose tris-(3,5-dichlorophenylcarbamate), immobilized on porous, spherical, silica particles, 3 to 5 µm in diameter | Chiralpak IC Chiralpak IC-3 | Chiral Technologies Chiral Technologies |
| L## | (Naproxen, (S,S)Whelk-01) 1-(3,5-dinitrobenzamido)-1,2,3,4-tetrahydrophenanthrene covalently bonded to porous spherical silica particles, 5 to 10 µm in diameter | (S,S) Whelk-01 | Regis Technologies |
| L## | (Frovatriptan Succinate, Chiralpak AS-H) – Amylose tris([(S)alpha-phenethyl]carbamate) coated on porous, spherical silica particles, 3 to 10 µm in diameter | Chiralpak AS Chiralpak AS-H Chiralpak AS-3 | Daicel/Chiral Technologies Daicel/Chiral Technologies Daicel/Chiral Technologies |
| L## | (Sodium Nitrite, IonPac AS12A) – A strong anion-exchange resin consisting of a highly cross-linked 9 µm supermacroporous (2000 Angstroms) particles functionalized with very low cross-linked latex (0.2%) to provide alkyl quaternary ammonium ion sites | Dionex IonPac AS12A | Thermo Scientific |

| | | | |
|-----|---|---|--|
| L## | (Metaxalone, Zorbax SB-Aq) – Alkyl chain, reversed-phase bonded totally or superficially porous silica designed to retain hydrophilic and other polar compounds when using highly aqueous mobile phases, including 100% aqueous, 1.5 µm to 10 µm in diameter. | Zorbax SB-Aq | Agilent |
| L## | (Dalteparin Sodium, Dionex IonPac AS15) – A strong anion-exchange resin consisting of a highly cross-linked core of 5 – 9 µm macroporous particles having a 100 Angstroms average pore size and consisting of ethylvinylbenzene cross-linked with 55% divinylbenzene and an anion exchange layer grafted to the surface, which is functionalized with alkanol quaternary ammonium ions. | Dionex IonPac AS15 | Thermo Fisher |
| L## | (Ezetimibe, Chiracel OD-RH) – Cellulose tris(3,5-dimethylphenylcarbamate) reversed phase chiral stationary phase coated on 3 or 5 µm silica gel particles. | CHIRACEL OD-RH Lux Cellulose-1 | Daicel/Chiral Technologies Phenomenex |
| L## | (Liquid Glucose, Aminex HPX-42A) – Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the silver form, average 25 µm in diameter. | Aminex HPC-42A | Bio-rad |
| L## | (Rosuvastatin Calcium, Chiracel OJ-RH) – Cellulose tris(4-methylbenzoate)-coated porous spherical particles, 3 to 5 µm in diameter, for use with reversed phase mobile phases. | CHIRACEL OJ-RH Lux Cellulose-3 | Daicel/Chiral Technologies Phenomenex |
| L## | (Palonosetron Hydrochloride, Chirobiotic-V) – Glycopeptide vancomycin linked through multiple covalent bonds to 100 Angstroms spherical silica. | Astec Chirobiotic-V Astec Chirobiotic-V2 | Supelco Supelco |
| L## | (Teriparatide Acetate, Dionex IonPac AS4A, Dionex IonPac AG4A) – A strong anion-exchange resin consisting of a highly crosslinked 15 µm microporous particles functionalized with very low crosslinked latex (0.5%) to provide alkanol quaternary ammonium ion exchange sites. | Dionex IonPac AG4A Dionex IonPac AS4A | Thermo Fisher Thermo Fisher |
| L## | (Metoprolol Succinate, Halo Penta-HILIC) – Highly polar alkyl ligand comprising five hydroxyl groups that are chemically bonded to totally porous or superficially porous silica or a monolithic silica rod. | Halo Penta-HILIC | Advanced Materials Tech. |

| | | | |
|-----|---|----------------|----------------------|
| L## | (Allantoin, Cosmosil HILIC) – Triazol groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter | Cosmosil HILIC | Nacalai Tesque, Inc. |
|-----|---|----------------|----------------------|

MRM Aug 19, 2014