Chromatographic Properties	Similar Phases	USP Code	Page #
High purity, highly retentive phase for aromatic and unsaturated compounds.	Unique	L11	180
High purity, highly retentive phase for normal phase separation of polar analytes. Very high surface area.	Maxsil Si	L3	181
A very retentive, high-purity phase that exhibits excellent peak shape for a wide range of compounds. Recommended as a general purpose reversed phase column.	Discovery C18, Symmetry C18, Hypersil Gold C18, Luna C18, Zorbax C18, Kromasil C18, LiChrospher RP-18, Inertsil ODS-2, Develosil C18	L1	182
Highly retentive and selective for reversed phase separations of polar analytes. Highly base deactivated. Compatible with highly aqueous (up to 100%) mobile phases.	AQUA C18, Aquasil C18, Hypersil Gold AQ, YMC ODS-Aq	L1	183
One of a group of intrinsically base-deactivated (IBD) phases, with a polar group within, or intrinsic to, the alkyl bonded phase. Provides unique selectivity and high level of base deactivation while reducing or eliminating the need for mobile phase additives.	SymmetryShield, Discovery ABZ & ABZ+, Prism	L68	184
Very retentive, high-purity, base-deactivated reversed phase packing that exhibits excellent peak shape for a wide range of compounds.	Luna C8, Symmetry C8, Hypersil Gold C8	L7	183
Exceptionally stable C4 packing, with high bonding coverage and silanol base-deactivation. Exhibits shorter retention than C18 or C8 phases.	Supelcosil Butyl (C4), Delta-Pak C4	L26	184
Exceptionally stable C1 packing resists hydrolysis, even under acidic mobile phase conditions. Least retentive reversed phase hydrocarbon packing.	Spherisorb C1	L13	185
High-purity cyano phase with reduced silanol activity. Often a better choice than C18 for basic pharmaceuticals. Cyano is the most stable bonded phase for normal phase mode.	Platinum CN, Develosil Cyano, Luna CN, Hypersil Gold CN	L10	185
High-purity, highly retentive, base-deactivated phase with alternate selectivity to hydrocarbon phases, especially for aromatic analytes.	Platinum Phenyl, Supelcosil Phenyl, Betasil Phenyl	L11	186
Recommended for normal phase analyses of mono- and disaccharides and other similar compounds. Can also serve as a weak anion exchanger, with aqueous buffers.	Platinum Amino, Develosil NH2	L8	186
A pentafluorophenyl phase. Unique selectivity by interaction with functional groups of organohalogens or other basic analytes.	Fluophase PFP, Fluosep-RP Phenyl, Curosil PFP	L43	187
High purity, high surface area.	—	L3	188
Proprietary stationary phase can process up to twice as many samples per hour, compared to a conventional C18 phase.	Unique	—	188
High purity silica.	Unique	—	189
Silica manufactured by Restek.	BioBasic 18, Symmetry 300 C18, Jupiter 300 C18, Zorbax 300 OSB C18, Synchropak C18, 208 TP C18	L1	190
Silica manufactured by Restek.	BioBasic 8, Zorbax 300 OSB C8, Synchropak C8, 208 TP C8	L7	191
Silica manufactured by Restek.	BioBasic 4, Symmetry 300 C4, Jupiter 300 C4, Synchropak C4, 208 TP C4	L26	191
Silica manufactured by Restek.	Unique	L11	192
Silica manufactured by Restek.	Unique	L43	192
Silica manufactured by Restek.	—	L3	193

US Pharmacopeia Cross Reference

L1 Octadecyl silane chemically bonded to porous silica or ceramic microparticles, 1.7 to 10µm in diameter, or a monolithic rod.
Ultra II C18 (p. 157), Ultra II Aqueous C18 (p. 159), Pinnacle DB C18 (p. 166), Pinnacle DB Aqueous C18 (p. 171), Pinnacle II C18 (p. 173), Allure C18 (p. 178), Allure Aqueous C18 (p. 179), Ultra C18 (p. 182), Ultra Aqueous C18 (p. 183), Viva C18 (p. 190)

L3 Porous silica particles, 5 to 10µm in diameter.
Ultra II Silica (p. 164), Pinnacle DB Silica (p. 172), Pinnacle II Silica (p. 177), Allure Silica (p. 181), Ultra Silica (p. 188), Viva Silica (p. 193)

L7 Octylsilane chemically bonded to totally porous silica particles, 1.7 to 10µm in diameter.
Ultra II C8 (p. 158), Pinnacle DB C8 (p. 167), Pinnacle II C8 (p. 174), Ultra C8 (p. 183), Viva C8 (p. 191)

L8 An essentially monomolecular layer of aminopropylsilane chemically bonded to totally porous silica gel support, 3 to 10µm in diameter.
Pinnacle II Amino (p. 176), Ultra Amino (p. 186)

L10 Nitrile groups chemically bonded to porous silica particles, 3 to 10µm in diameter.
Pinnacle DB Cyano (p. 168), Pinnacle II Cyano (p. 175), Allure Basix (p. 178), Ultra Cyano (p. 185)

L11 Phenyl groups chemically bonded to porous silica particles, 1.7 to 10µm in diameter. *Ultra II Aromax (p. 161), Ultra II Biphenyl (p. 160), Pinnacle DB Phenyl (p. 168), Pinnacle DB Biphenyl (p. 170), Pinnacle II Phenyl (p. 175), Pinnacle II Biphenyl (p. 176), Allure Biphenyl (p. 180), Ultra Phenyl (p. 186), Viva Biphenyl (p. 192)*

L13 Trimethylsilane chemically bonded to porous silica particles, 3 to 10µm in diameter. *Ultra C1 (p. 185)*

L26 Butyl silane chemically bonded to totally porous silica particles, 3 to 10µm in diameter. *Ultra C4 (p.184), Viva C4 (p.191)*

L43 Pentafluorophenyl groups chemically bonded to silica particles by a propyl spacer, 5 to 10µm in diameter.
Ultra II PFP Propyl (p. 163), Pinnacle DB PFP Propyl (p. 169), Allure PFP Propyl (p. 179), Ultra PFP (p. 187), Viva PFP Propyl (p. 192)

L68 Spherical, porous silica, 100µm or less in diameter, the surface of which has been covalently modified with alkyl amide groups and not end capped.
Ultra II IBD (p. 162), Pinnacle DB IBD (p. 171), Ultra IBD (p. 184)