

Колони за течна хроматография и LC/MS

USP обозначения

Обозначения според US Pharmacopeia (USP)

Фармакопеята на САЩ (USP) е стандартен източник за много фармацевтични методи. Тя специфицира колоните по тип пълнеж, а не по производител. По-долу са посочени препоръваните колони за течна хроматография от Agilent Technologies, които са подходящи за повечето ТХ методи, описани в USP.

USP означение	USP пълнеж	Колони Agilent	Размер на частиците (µm)	Размер на порите (Å)
L1	Octadecyl silane chemically bonded to porous silica or ceramic micro-particles, 1.5 to 10 µm in diameter	ZORBAX ODS	5	70
		ZORBAX ODS classic	5	70
		ZORBAX Eclipse Plus C18	3.5 and 5	80
		ZORBAX Eclipse XDB-C18	3.5 and 5	80, 300
		ZORBAX SB-C18	3.5 and 5	80, 300
		ZORBAX Rx-C18	3 and 5	120
		ZORBAX Extend-C18	5 and 10	100
		ZORBAX Extend-C18	5	100
		LiChrosorb RP-18	5	100
		LiChrospher RP-18	4	100
		Purospher RP-18/-e	5	100
		Superspher RP-18/-e	5	100
		Nucleosil 100-5 C18	5	100
L2	Octadecyl silane chemically bonded to porous silica gel of a controlled surface porosity that has been bonded to a solid spherical core, 3 to 50 µm in diameter	N/A		
L3	Porous silica particles, 5 to 10 µm in diameter	ZORBAX SIL	5	70
		ZORBAX Rx-Sil	3.5 and 5	80, 300
		LiChrospher 60 Si	5	60
L4	Silica gel of controlled surface porosity bonded to a solid spherical core, 30 to 50 µm in diameter	Custom Order		
L5	Alumina of controlled surface porosity bonded to a solid spherical core, 30 to 50 µm in diameter	N/A		
L6	Strong cation-exchange packing; sulfonated fluorocarbon polymer coated on a solid spherical core, 30 to 50 µm in diameter	N/A		
L7	Octyl silane chemically bonded to totally porous microsilica particles, 1.5 to 10 µm in diameter	ZORBAX C8	5	70
		ZORBAX Eclipse Plus C8	3.5 and 5	80
		ZORBAX Eclipse XDB-C8	3.5 and 5	80, 300
		ZORBAX SB-C8	3.5 and 5	80, 300
		ZORBAX Rx-C8	3.5 and 5	80, 300
		LiChrosorb RP-8	5	100
		LiChrospher RP-8	5	100
		LiChrospher RP select B	5	60
L8	An essentially monomolecular layer of aminopropyl-silane chemically bonded to totally porous silica gel support, 10 µm in diameter	ZORBAX NH ₂	5	70
		LiChrospher NH ₂	5	100

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L9	10 µm irregular, totally porous silica gel having a chemically bonded, strongly acidic cation-exchange coating	ZORBAX SCX SynChropak SCX	5 spherical 6.5	300 300
L10	Nitrile groups chemically bonded to porous silica particles, 3 to 10 µm in diameter	ZORBAX CN ZORBAX SB-CN ZORBAX Eclipse XDB-CN LiChrospher CN	5 3.5 and 5 3.5 and 5 5	70 80, 300 80 100
L11	Phenyl groups chemically bonded to porous silica particles, 1.5 to 10 µm in diameter	ZORBAX Phenyl ZORBAX SB-Phenyl ZORBAX Eclipse XDB Phenyl	5 3.5 and 5 3.5 and 5	70 80 80
L12	Strong anion-exchange packing made by chemically bonding aquaternary amine to asolid silica spherical ore, 30 to 50 µm in diameter	Accubond Bulk SAX, 25g bottle		
L13	Trimethylsilane chemically bonded to porous silica particles, 3 to 10 µm in diameter	ZORBAX TMS	5	70
L14	Silica gel 10 µm in diameter with a chemically bonded, strongly basic quaternary ammonium anion-exchange coating	ZORBAX SAX SynChropak SAX	5 6.5	70 300
L15	Hexyl silane chemically bonded to totally porous silica particles, 3 to 10 µm in diameter	N/A		
L16	Dimethyl silane chemically bonded to totally porous silica particles, 3 to 10 µm in diameter	N/A		
L17	Strong cation exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the hydrogen form, 7 to 11 µm in diameter	N/A		
L18	Amino and cyano groups chemically bonded to porous silica particles, 5 to 10 µm in diameter	N/A		
L19	Strong cation exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the calcium form, 9 µm in diameter	N/A		
L20	Dihydroxypropane groups chemically bonded to porous silica particles, 3 to 10 µm in diameter	LiChrospher Diol	5	100



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L21	A rigid, spherical styrene-divinylbenzene copolymer, 5 to 10 µm in diameter	N/A		
L22	A cation exchange resin made of porous polystyrene gel with sulfonic acid groups, about 10 µm in size	N/A		
L23	An ion exchange resin made of porous polymethacrylate or polyacrylate gel with quaternary ammonium groups, about 10 µm in size	N/A		
L24	A semi-rigid hydrophilic gel consisting of vinyl polymers with numerous hydroxyl groups on the matrix surface, 32 to 63 µm in diameter	N/A		
L25	Packing having the capacity to separate compounds with a MW range from 1000 to 5000 da (as determined by the polyethylene oxide), applied to neutral, anionic and cationic water-soluble polymers	PL aquagel-OH		N/A
L26	Butyl silane chemically bonded to totally porous silica particles, 5 to 10 µm in diameter			
L27	Porous silica particles, 30 to 50 µm in diameter	AccuBond Bulk SIL, 25 g bottle		
L28	A multifunctional support, which consists of a high purity, 100E, spherical silica substrate that has been bonded with anionic (amine) functionality in addition to conventional reversed-phase C8 functionality	N/A		
L29	Gamma alumina, reversed phase, low carbon percentage by weight, alumina-based polybutadiene spherical particles, 5 µm diameter with a pore diameter of 80E	N/A		
L30	Ethyl silane chemically bonded to a totally porous silica particle, 3 to 10 µm in diameter	N/A		

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L31	A 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 2000E and consisting of ethylvinylbenzene cross-linked with 55% divinylbenzene	N/A		
L32	A chiral ligand-exchange packing L-proline copper complex covalently bonded to irregularly shaped silica particles, 5 to 10 µm in diameter	N/A		
L33	Packing having the capacity to separate proteins by molecular size over a range of 4,000 to 400,000 da. It is spherical, silica-based, and processed to provide pH stability	ZORBAX GF-250	4	150
L34	Strong cation exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the lead form, 9 µm in diameter	N/A		
L35	A zirconium-stabilizes spherical silica packing with a hydrophilic (diol-type) molecular monolayer bonded phase	ZORBAX GF-250 ZORBAX GF-450	4 6	150 300
L36	L-Phenylglycine-3,5-dinitrobenzoyl on 5 µm amino propyl silica	N/A		
L37	Polymethacrylate gel packing having the capacity to separate proteins by molecular size over a range of 2,000-4,000 da MW	N/A		
L38	Methacrylate-based size exclusion packing for water solubles	N/A		
L39	Hydrophilic polyhydroxymethacrylate gel of totally porous spherical resin	N/A		
L40	Cellulose tris-3,5-dimethylphenylcarbamate coated porous silica particles, 5 to 20 µm in diameter	N/A		



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L41	Immobilized alpha-acid glyco-protein on spherical silica particles, 5 µm in diameter	N/A		
L42	Octylsilane and octadecylsilane groups chemically bonded to porous silica particles	N/A		
L43	Pentafluorophenyl groups chemically bonded to silica particles 5 to 10 µm in diameter	N/A		
L44	A multifunctional support, which consists of a high purity, 60E spherical silica substrate, that has been bonded with a cationic exchanger, sulfonic acid functionality in addition to a conventional reversed phase C8 functionality	N/A		
L45	Beta cyclodextrin bonded to porous silica particles, 5 to 10 µm in diameter	ChiraDex Chiral	5	
L46	Polystyrene/divinylbenzene substrate agglomerated with quaternary amine functionalized latex beads, 10 µm in diameter	N/A		
L47	High capacity anion exchange microporous substrate, fully functionalized with a trimethyl-amine group, 8 µm in diameter	N/A		
L48	Sulfonated, cross-linked polystyrene with an outer layer of submicron, porous, anion-exchange microbeads, 15 µm in diameter	N/A		
L49	Amylose tris-3,5-dimethylphenyl-carabamate-coated, porous, spherical, silica particles, 5 to 10 µm in diameter	N/A		
L50	A strong cation exchange resin made of porous silica with sulfopropyl groups, 5 to 10 µm in diameter	ZORBAX 300SCX SynChropak SCX	5 5	300 300

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L51	A reversed-phase packing made by coating a thin layer of polybutadiene on to spherical porous zirconia particles, 3 to 10 µm in diameter	N/A		
L52	Multifunction resin with reversed-phase retention and strong anion-exchange functionalities. The resin consists of ethylvinyl-benzene, 55% cross-linked with divinylbenzene copolymer, 3 to 15 µm in diameter, and a surface area of not less than 350m ² /g, substrate is coated with quaternary ammonium functionalized latex particles consisting of styrene cross-linked with divinylbenzene.	N/A		
L53	An anion-exchange resin consisting of rigid, spherical styrene-divinylbenzene copolymer with trimethylammonium groups at a loading of about 2 meq per g, 3 to 29 µm in diameter	N/A		
L54	Strong cation-exchange resin consisting of sulfonated cross-linked styrene-divinylbenzene copolymer in the sodium form, about 7 to 11 µm diameter	N/A		
L55	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 µ Eq/column	N/A		
L56	Propyl silane chemically bonded to totally porous silica particles, 3 to 10 µm in diameter	SB-C3	3.5 and 5	80
L57	A chiral-recognition protein, ovomucoid, chemically bonded in silica particles, about 5 µm in diameter, with a pore size of 120 angstroms.	Ultron ES-OVM	5	120

