

Strategy, Uptisphere and Uptisphere Bio are based on spherical, ultra- pure silica (99.999% SiO2)

Column Name	Phase Name	Bonded Phase	Particle Size	Application	Bonding type	% C	End-Capping	pH range	USP Code	Pore Size	Surface Area
Strategy™	C18-2	C18	1.7 µm	This general purpose phase serves many pharmaceutical applications. Its 425 m2/g surface area provides excellent loading capacity.	mono-functional	19%	Multi step	1 - 10	L1	100 Å	425 m²/g
Strategy™	C18-2	C18	2.2 µm		mono-functional	19%	Multi step	1 - 10	L1	100 Å	425 m²/g
Strategy™	C18-2	C18	3 µm		mono-functional	19%	Multi step	1 - 10	L1	100 Å	425 m²/g
Strategy™	C18-2	C18	5 µm		mono-functional	19%	Multi step	1 - 10	L1	100 Å	425 m²/g
Strategy™	C18-2	C18	10 µm		mono-functional	19%	Multi step	1 - 10	L1	100 Å	425 m²/g
Strategy™	C18-2	C18	15 µm		mono-functional	19%	Multi step	1 - 10	L1	100 Å	425 m²/g
Strategy™	C18-3	C18	3 µm	The high bonding density of C18-3 facilitates a stronger separation of non polar compounds. Multi step bonding technology guarantees a fully end-capped phase, stable under basic pH conditions. C18-3 is an excellent phase for the integral separation of basic drugs up to pH : 12.	mono-functional	22%	Multi step	1 - 12	L1	100 Å	425 m²/g
Strategy™	C18-3	C18	5 µm		mono-functional	22%	Multi step	1 - 12	L1	100 Å	425 m²/g
Strategy™	C18-3	C18	10 µm		mono-functional	22%	Multi step	1 - 12	L1	100 Å	425 m²/g
Strategy™	C18-3	C18	15 µm		mono-functional	22%	Multi step	1 - 12	L1	100 Å	425 m²/g
Strategy™	RP	C18	3 µm	Suitable for mid & non polar compounds. RP shows excellent mechanical stability under 100% aqueous mobile phase condition.	mono-functional	16%	Mixed	1.5 - 8	L1	100 Å	425 m²/g
Strategy™	RP	C18	5 µm		mono-functional	16%	Mixed	1.5 - 8	L1	100 Å	425 m²/g
Strategy™	RP	C18	10 µm		mono-functional	16%	Mixed	1.5 - 8	L1	100 Å	425 m²/g
Strategy™	NEC	C18	2.2 µm	NEC strongly retains the polar and mid-polar compounds.It overcomes peak tailing with compounds that contains chains and /or carbon cycles combined with numerous polar groups and/or basic in character.	mono-functional	18%	none	1.5 - 7	L1	100 Å	425 m²/g
Strategy™	PLP	Alkyl chain w/ polar embedded group	2.2 µm	Suitable for mid & non polar compound separation. Provides excellent peak shape with basic co Non polar compounds. Less retentive than C18 with greather capacity	poly-functional	14%	Multi step	2.5 - 7.5	L1	100 Å	425 m²/g
Strategy™	PRO	C12	2.2 µm		mono-functional	16%	One step	1.5 - 8		100 Å	425 m²/g
Strategy™	PRO	C12	5 µm		mono-functional	16%	One step	1.5 - 8		100 Å	425 m²/g
Strategy™	RPX	Proprietary	2.2 µm	Mid & non polar compounds. High loading capacity.	mono-functional	n.a.	none	1.5 - 7		100 Å	425 m²/g
Strategy™	RPX	Proprietary	5 µm		mono-functional	n.a.	none	1.5 - 7		100 Å	425 m²/g
Strategy™	C8-2	C8	3 µm	Mid-polar and non polar compounds. Less retentive than C18	mono-functional	14%	One step	1.5 - 7	L7	100 Å	425 m²/g
Strategy™	C8-2	C8	5 µm		mono-functional	14%	One step	1.5 - 7	L7	100 Å	425 m²/g

Strategy™	C8-2	C8	10 µm	Highly polar compounds & ionisable basic drugs	mono-functional	14%	One step	1.5 - 7	L7	100 Å	425 m²/g
Strategy™	C8-2	C8	15 µm		mono-functional	14%	One step	1.5 - 7	L7	100 Å	425 m²/g
Strategy™	HILIC	Proprietary	1.7 µm		n.a.		NA	1.5 - 7	L4	100 Å	450 m²/g
Strategy™	HILIC	Proprietary	2.2 µm		n.a.		NA	1.5 - 7	L4	100 Å	450 m²/g
Strategy™	HILIC	Proprietary	5 µm		n.a.		NA	1.5 - 7	L4	100 Å	450 m²/g
Strategy™	SI	Virgin Silica	2.2 µm	Non-ionic, polar organic compounds			NA	1.5 - 7	L4	100 Å	425 m²/g
Strategy™	SI	Virgin Silica	3 µm				NA	1.5 - 7	L4	100 Å	425 m²/g
Strategy™	SI	Virgin Silica	5 µm				NA	1.5 - 7	L4	100 Å	425 m²/g
Strategy™	SI	Virgin Silica	10 µm				NA	1.5 - 7	L4	100 Å	425 m²/g
Strategy™	SI	Virgin Silica	15 µm				NA	1.5 - 7	L4	100 Å	425 m²/g
Strategy™	NH2	NH₂	2.2 µm	Carbohydrates / polar organics compounds & organic acids	mono-functional	4%	none	1.5 - 7	L8	100 Å	425 m²/g
Uptisphere®	HSC	C18	3 µm	Non-polar compounds	mono-functional	20%	Multi step	1.5 - 8	L1	n.a.	n.a.
Uptisphere®	HSC	C18	5 µm		mono-functional	20%	Multi step	1.5 - 8	L1	n.a.	n.a.
Uptisphere®	ODB	C18	3 µm	Historically our C18-phase of reference for method development. Serves a broad range of analytical requirements for separating mid to non polar compounds.	mono-functional	18%	One step	1.5 - 7	L1	120 Å	320 m²/g
Uptisphere®	ODB	C18	5 µm		mono-functional	18%	One step	1.5 - 7	L1	120 Å	320 m²/g
Uptisphere®	ODB	C18	10 µm		mono-functional	18%	One step	1.5 - 7	L1	120 Å	320 m²/g
Uptisphere®	ODB	C18	15 µm		mono-functional	18%	One step	1.5 - 7	L1	120 Å	320 m²/g
Uptisphere®	HDO	C18	3 µm	Suitable for mid & non polar compound separation. Shows excellent stability under 100% aqueous mobile phase condition.	mono-functional	17%	Mixed	1.5 - 7	L1	120 Å	320 m²/g
Uptisphere®	HDO	C18	5 µm		mono-functional	17%	Mixed	1.5 - 7	L1	120 Å	320 m²/g
Uptisphere®	HDO	C18	10 µm		mono-functional	17%	Mixed	1.5 - 7	L1	120 Å	320 m²/g
Uptisphere®	NEC	C18	3 µm	NEC strongly retains the polar and mid-polar compounds.It overcomes peak tailing with compounds that contains chains and /or carbon cycles combined with numerous polar groups and/or basic in character.	mono-functional	16%	none	1.5 - 6.5	L1	120 Å	320 m²/g
Uptisphere®	NEC	C18	5 µm		mono-functional	16%	none	1.5 - 6.5	L1	120 Å	320 m²/g
Uptisphere®	NEC	C18	10 µm		mono-functional	16%	none	1.5 - 6.5	L1	120 Å	320 m²/g
Uptisphere®	TF	C18	5 µm	Alternative selectivity for challenging separations & for - but not limited to - aromatic, polyphenol, PAHs etc.	poly-functional	14%	One step	1.5 - 8	L1	n.a.	n.a.
Uptisphere®	PLP	Alkyl chain w/ polar embedded group	3 µm	100% compatibility with aqueous mobile phases - Excellent peak symmetry with basic compounds - Very good retention of mid & non polar compounds	poly-functional	14%	Multi step	2.5 - 7.5	L1	120 Å	320 m²/g

Uptisphere®	PLP	Alkyl chain w/ polar embedded group	5 µm		poly-functional	14%	Multi step	2.5 - 7.5	L1	120 Å	320 m²/g
Uptisphere®	PAH	C18	5 µm	PAHs	poly-functional	12%	none	1.5 - 7	L1	n.a.	n.a.
Uptisphere®	C8	C8	3 µm	Mid-polar and non polar compounds. Less retentive than C18	mono-functional	11%	One step	2 - 7	L7	120 Å	320 m²/g
Uptisphere®	C8	C8	5 µm		mono-functional	11%	One step	2 - 7	L7	120 Å	320 m²/g
Uptisphere®	C8	C8	10 µm		mono-functional	11%	One step	2 - 7	L7	120 Å	320 m²/g
Uptisphere®	C8	C8	15 µm		mono-functional	11%	One step	2 - 7	L7	120 Å	320 m²/g
Uptisphere®	C8U	C8	5 µm	Mid-polar compounds.	mono-functional	7%	none	2 - 6.5	L7	120 Å	320 m²/g
Uptisphere®	MM1	C8 /SCX	5 µm	Mid-polar and non polar organic compounds under cationic form	mono-functional	n.a.	none	2 - 6.5	L44	120 Å	320 m²/g
Uptisphere®	MM3	C8 /SAX	5 µm	Mid-polar and non polar organic compounds under anionic form	mono-functional	n.a.	none	2 - 6.5	L28	120 Å	320 m²/g
Uptisphere®	C4	C4	5 µm	Mid-polar compounds. Less retentive than C8	mono-functional	7%	One step	2 - 7	L26	120 Å	320 m²/g
Uptisphere®	CN	CN	3 µm	Polar compounds	mono-functional	8%	One step	2 - 7	L10	120 Å	320 m²/g
Uptisphere®	CN	CN	5 µm		mono-functional	8%	One step	2 - 7	L10	120 Å	320 m²/g
Uptisphere®	PH	PH	5 µm	Very selective for compounds with aromatic cycles	mono-functional	9%	One step	2 - 7	L11	120 Å	320 m²/g
Uptisphere®	DNAP	DNAP - dinitroanilino propyl phenyl	5 µm	Aromatic compounds separated by increasing number of cycles	mono-functional	n.a.	none	2 - 6.5		120 Å	320 m²/g
Uptisphere®	OH	OH - diol	6 µm	Peptides & oligopeptides gel filtration / polar organic compounds	mono-functional	6%	none	2 - 6.5	L20	120 Å	320 m²/g
Uptisphere®	SI	Virgin Silica	3 µm	Non-ionic, polar organic compounds				1.5 - 6.5	L4	120 Å	320 m²/g
Uptisphere®	SI	Virgin Silica	5 µm					1.5 - 6.5	L4	120 Å	320 m²/g
Uptisphere®	SI	Virgin Silica	10 µm					1.5 - 6.5	L4	120 Å	320 m²/g
Uptisphere®	SI	Virgin Silica	15 µm					1.5 - 6.5	L4	120 Å	320 m²/g
Uptisphere®	NH2	NH ₂	3 µm	Carbohydrates / polar organics compounds and organic acids	mono-functional	5%	none	2 - 6.5	L8	120 Å	320 m²/g
Uptisphere®	NH2	NH ₂	5 µm		mono-functional	5%	none	2 - 6.5	L8	120 Å	320 m²/g
Uptisphere®	SCX	SCX	5 µm	Cationic charged & basic organic compounds	mono-functional		none	1 - 7.5	L50	120 Å	320 m²/g
Uptisphere®	SCX	SCX	10 µm		mono-functional		none	1 - 7.5	L50	120 Å	320 m²/g
Uptisphere®	SSX	SCX	5 µm	Cationic charged & basic organic compounds. High Capacity.	mono-functional		none	1 - 8.5	L50	n.a.	n.a.
Uptisphere®	SAX	SAX	5 µm	Anionic charged compounds, nucleotides, nucleosides, organic acids ...	mono-functional		none	1 - 7.5	L14	120 Å	320 m²/g
Uptisphere®	SAX	SAX	10 µm		mono-functional		none	1 - 7.5	L14	120 Å	320 m²/g
Uptisphere® Bio	WOD	C18	3 µm	Weakly hydrophobic peptides & oligopeptides up to 50 kD	mono-functional	10%	One step	1.5 - 7	L1	300 Å	100 m²/g

Uptisphere® Bio	WOD	C18	5 µm		mono-functional	10%	One step	1.5 - 7	L1	300 Å	100 m²/g
Uptisphere® Bio	WOD	C18	10 µm		mono-functional	10%	One step	1.5 - 7	L1	300 Å	100 m²/g
Uptisphere® Bio	WOD	C18	15 µm		mono-functional	10%	One step	1.5 - 7	L1	300 Å	100 m²/g
Uptisphere® Bio	PXP	C18	5 µm	Fairly hydrophobic peptides & oligopeptides up to 60 kD	poly-functional	8%	One step	1 - 10	L1	300 Å	100 m²/g
Uptisphere® Bio	PXP	C18	10 µm		poly-functional	8%	One step	1 - 10	L1	300 Å	100 m²/g
Uptisphere® Bio	PXP	C18	15 µm		poly-functional	8%	One step	1 - 10	L1	300 Å	100 m²/g
Uptisphere® Bio	WTF	C18	5 µm	Fairly hydrophobic peptides & oligopeptides up to 40 kD	tri-functional	12%	One step	1.5 - 8	L1	300 Å	100 m²/g
Uptisphere® Bio	WC8	C8	5 µm	Hydrophobic polypeptides & peptides up to 80 kD	mono-functional	8%	One step	2 - 7	L7	300 Å	100 m²/g
Uptisphere® Bio	WC8	C8	10 µm		mono-functional	8%	One step	2 - 7	L7	300 Å	100 m²/g
Uptisphere® Bio	WC8	C8	15 µm		mono-functional	8%	One step	2 - 7	L7	300 Å	100 m²/g
Uptisphere® Bio	WD8	C8	5 µm	Hydrophobic polypeptides & peptides up to 80 kD	poly-functional	8%	One step	1.5 - 8	L7	300 Å	100 m²/g
Uptisphere® Bio	WD8	C8	10 µm		poly-functional	8%	One step	1.5 - 8	L7	300 Å	100 m²/g
Uptisphere® Bio	WD8	C8	15 µm		poly-functional	8%	One step	1.5 - 8	L7	300 Å	100 m²/g
Uptisphere® Bio	WT8	C8	5 µm	Hydrophobic polypeptides & peptides up to 80 kD	tri-functional	6%	One step	1.5 - 8	L7	300 Å	100 m²/g
Uptisphere® Bio	WT8	C8	10 µm		tri-functional	6%	One step	1.5 - 8	L7	300 Å	100 m²/g
Uptisphere® Bio	WT8	C8	15 µm		tri-functional	6%	One step	1.5 - 8	L7	300 Å	100 m²/g
Uptisphere® Bio	WC4	C4	3 µm	Hydrophobic proteins & polypeptides, 50 up to 150 kD	mono-functional	4%	One step	2 - 7	L26	300 Å	100 m²/g
Uptisphere® Bio	WC4	C4	5 µm		mono-functional	4%	One step	2 - 7	L26	300 Å	100 m²/g
Uptisphere® Bio	WC4	C4	10 µm		mono-functional	4%	One step	2 - 7	L26	300 Å	100 m²/g
Uptisphere® Bio	WC4	C4	15 µm		mono-functional	4%	One step	2 - 7	L26	300 Å	100 m²/g
Uptisphere® Bio	WD4	C4	3 µm	Hydrophobic proteins & polypeptides, 50 up to 150 kD	poly-functional	4%	One step	1.5 - 8	L26	300 Å	100 m²/g
Uptisphere® Bio	WD4	C4	5 µm		poly-functional	4%	One step	1.5 - 8	L26	300 Å	100 m²/g
Uptisphere® Bio	WD4	C4	10 µm		poly-functional	4%	One step	1.5 - 8	L26	300 Å	100 m²/g
Uptisphere® Bio	WD4	C4	15 µm		poly-functional	4%	One step	1.5 - 8	L26	300 Å	100 m²/g
Uptisphere® Bio	WT4	C4	5 µm	Hydrophobic proteins & polypeptides, 50 up to 150 kD	tri-functional	3%	One step	1.5 - 8	L26	300 Å	100 m²/g
Uptisphere® Bio	WT4	C4	10 µm		tri-functional	3%	One step	1.5 - 8	L26	300 Å	100 m²/g
Uptisphere® Bio	WT4	C4	15 µm		tri-functional	3%	One step	1.5 - 8	L26	300 Å	100 m²/g

The comparative data used above may not be representative of all applications

More information from MD Scientific ApS, Denmark: www.md-scientific.dk