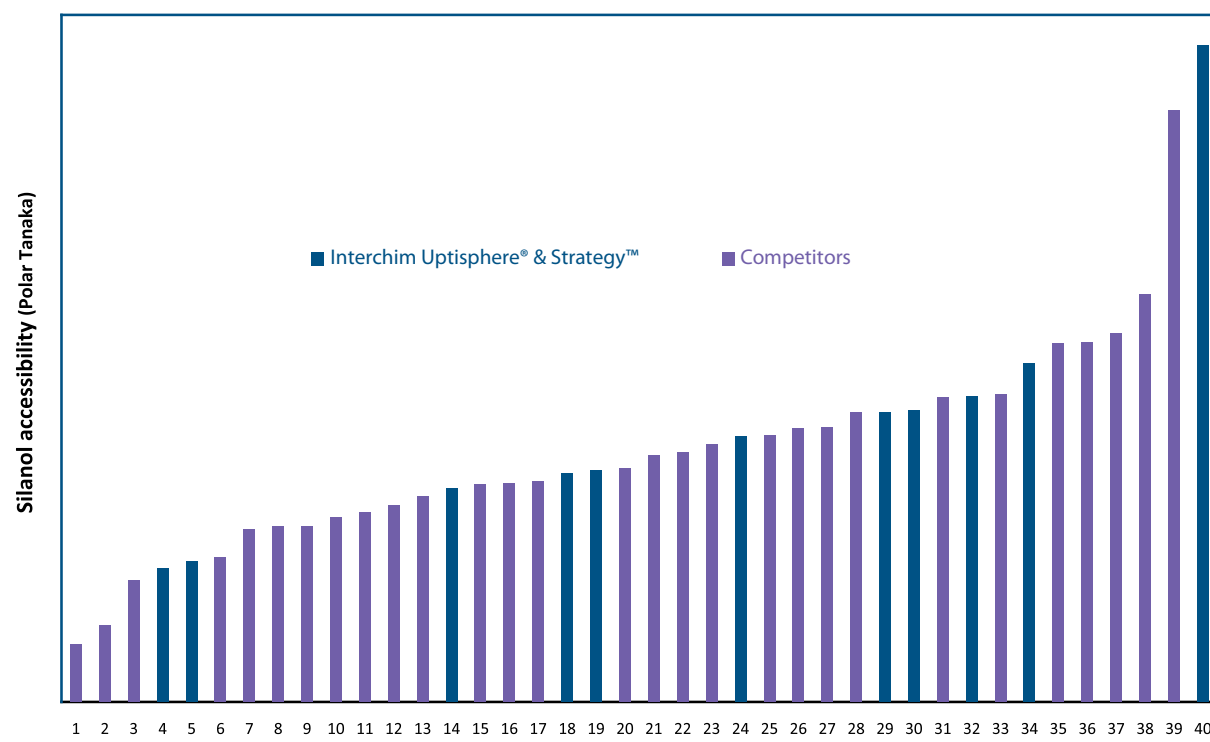


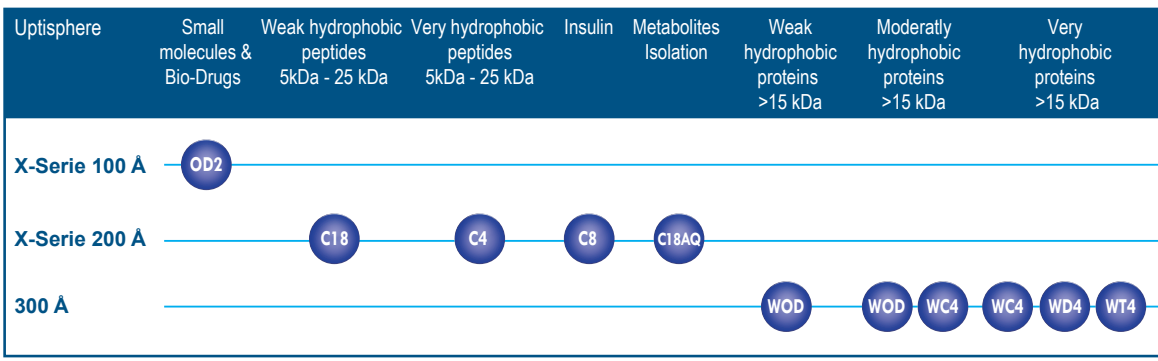
> Selection Guide according to the "Neutral" Tanaka Test



N°	Manufacturer - Brand	N°	Manufacturer - Brand	N°	Manufacturer - Brand	N°	Manufacturer - Brand
1	SAF - Supelco ABZ+	11	Thermo Scientific - Hypersil Gold	21	Phenomenex - Gemini	31	Phenomenex - Synergy Fusion RP
2	Waters - Xbridge Shield	12	Waters - Symetry C18	22	Phenomenex - Synergi MaxRP 4µm	32	Interchim - Uptisphere MM1
3	Waters - Xterra C18	13	Phenomenex - Prodigy ODS 3	23	Grace - Alltima HP C18	33	Macherey Nagel - Nucleosil HD
4	Interchim - Uptisphere TF	14	Interchim - Uptisphere Strategy C18-2	24	Interchim - Uptisphere ODB	34	Interchim - Uptisphere HDO
5	Interchim - Uptisphere Strategy C12	15	Phenomenex - Luna C18(2)	25	Macherey Nagel - Nucleodur C18 Pyramid	35	YMC - Pack ODS-AQ
6	Waters - Xbridge C18	16	Waters - Xterra MS	26	Merck - Superspher E	36	Phenomenex - Synergy Hydro RP
7	Macherey Nagel - Nucleodur C18 Gravity	17	Thermo Scientific - Hypersil Gold AQ	27	GL Sciences - Inertsil ODS 3	37	Agilent - Zorbax RX C18
8	Agilent - Zorbax Extend C18	18	Interchim - Uptisphere Strategy C18-3	28	YMC - PRO C18	38	Merck - Purospher RP18
9	Eka Nobel - Kromasil C18	19	Interchim - Uptisphere PLP	29	Interchim - Uptisphere Strategy RP	39	Merck - Superspher 100A RP18
10	Agilent - Zorbax Bonus RP	20	Agilent - Zorbax Eclipse XDB	30	Interchim - Uptisphere HSC	40	Interchim - Uptisphere NEC

Tanaka Test at 30°C. All registered and Trade Mark belong to their respective owners.

> Selection Guide for Biomolecules



211 bis avenue J.F. Kennedy
BP 1140 - 03100 Montluçon
France
Tél +33 4 70 03 88 55
Fax + 33 4 70 03 82 60
www.interchim.com

USA
Interchim® Inc
1536 West 25th Street, Suite 452
San Pedro CA 90732
Tel. 800 560 8262
Fax 310 802 3877
web@interchiminc.com

UK
Cheshire Sciences UK Ltd
67 Bridge Street Rows.
Chester - CH1 1NW
Tel. 01244 620486
Fax 01244 620378
ask@cheshiresciences.com

Benelux
benelux@interchim.com

Germany & Austria
germany@interchim.com



UHPLC, HPLC & prep LC Columns

Uptisphere®
Uptisphere® Strategy™
Uptisphere® 300 Å
Uptisphere® X-Series



> UHPLC, HPLC & prep LC Columns

Uptisphere®
HPLC & prep LC columns for the identification, separation & purification of small molecules & pharma compounds.

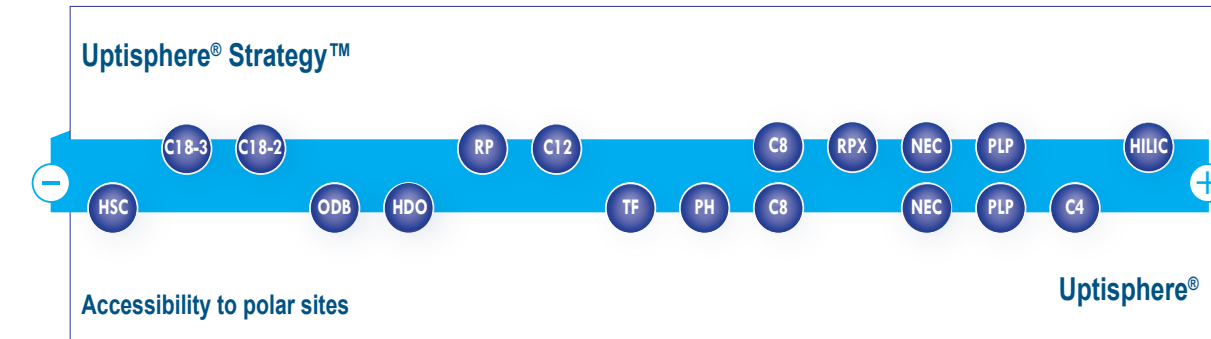
Uptisphere® Strategy™
UHPLC, Analytical & prep LC columns with high loadability for the identification, separation & purification of small molecules & pharma compounds.

Uptisphere® X-serie™
HPLC & prep LC columns for the identification, analysis & purification of small molecules & bio-medicaments at high & low pH.

Uptisphere® 300Å
HPLC & prep LC columns for identification, analysis & purification of Proteins, Peptides & Polypeptides.

Description	UHPLC		HPLC		
	1,7µm	2,2µm	3µm	5µm	10µm
Small Molecules					
Uptisphere® Strategy™ C18-3			+	+	
Uptisphere® Strategy™ C18-2	+	+	+	+	+
Uptisphere® Strategy™ RP			+	+	
Uptisphere® Strategy™ NEC	+	+			
Uptisphere® Strategy™ PLP		+			
Uptisphere® Strategy™ C12		+			
Uptisphere® Strategy™ RPX		+		+	
Uptisphere® Strategy™ C8-2		+		+	
Uptisphere® Strategy™ Hilic	+	+			
Uptisphere® Strategy™ SI	+	+	+	+	+
Uptisphere® Strategy™ NH2		+			
Uptisphere® HSC			+		
Uptisphere® ODB			+	+	+
Uptisphere® HDO			+	+	
Uptisphere® NEC			+		
Uptisphere® TF				+	
Uptisphere® PLP				+	
Uptisphere® C8			+		
Uptisphere® PH				+	
Uptisphere® C4				+	
Uptisphere® CN			+		
Uptisphere® Diol				+	
Uptisphere® SI			+		
Uptisphere® MM1			+	+	
Uptisphere® NH2			+		
Uptisphere® SCX				+	+
Uptisphere® SAX				+	+
Biochromatography					
Uptisphere® X-serie OD2			+	+	+
Uptisphere® X-serie C18			+	+	+
Uptisphere® X-serie AQ			+	+	+
Uptisphere® X-serie C8			+	+	+
Uptisphere® X-serie C4			+	+	+
Uptisphere® 300Å WOD			+	+	+
Uptisphere® 300Å WOC4			+	+	+
Uptisphere® 300Å WD4			+	+	+
Uptisphere® 300Å WT4			+	+	+

> Selection Guide for Small Molecules



> Stationary Phases & Features

Strategy™ C18-3

100Å - 425m²/g
3, 5, 10 & 15 µm

Bonding: C18
%C: 22
End-capping: multi-step

pH stability: 1.0 to 12.0

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.

Uptisphere® C18-ODB

120Å - 320m²/g
3, 5 & 10 µm

Bonding: C18
%C: 18
End-capping: one-step

pH stability: 1.5 to 7.0

Serves a broad-ship of analytical requirements for separating non polar compounds.

Strategy™ C18-2

100Å - 425m²/g
1.7, 2.2, 3 & 5 µm

Bonding: C18
%C: 19
End-capping: multi-step

pH stability: 1.0 to 10.0

This utility phase serves many pharmaceutical applications. Its 425 m²/g surface area providing excellent loading capacity capabilities.

puriFlash® HQ

100Å - 425m²/g
10 & 15 µm

Bonding: C18
%C: 19
End-capping: multi-step

pH stability: 1.0 to 10.0

HPLC quality for difficult purification Rs < 1.5

Uptisphere® C18-TF

120Å - 320m²/g
3, 5 & 10 µm

Bonding: C18
%C: 14
End-capping: one-step

pH stability: 1.5 to 8.0

Alternative selectivity for challenging separations & for - but not limited to - aromatic, polyphenol, PAHs etc.

Strategy™ RP

100Å - 425m²/g
3, 5, 10 & 15 µm

Bonding: C18
%C: 16
End-capping: one-step hydrophilic

pH stability: 1.5 to 8.0

Suitable for mid & non polar compound separation. RP shows excellent mechanical stability under 100% aqueous mobile phase condition.

Strategy™ C12

100Å - 425m²/g
3 & 5 µm

Bonding: C12
%C: 16
End-capping: one-step

pH stability: 1.5 to 8.0

Less retentive than C18 with greater capacity

Uptisphere® C8

120Å - 320m²/g
3 & 5 µm

Bonding: C8
%C: 11
End-capping: one-step

pH stability: 2.0 to 7.0

Less retentive than C18

Brand Name	Code	USP Code	Pore size	Surface Area	Bonding	Bonding Type	Carbon content	End-Capping	pH range	Utilization Mode
Uptisphere® Strategy™	C18-3	L1	100 Å	425 m ² /g	C18 - octadecyl	mono-fonctionnel	22%	Multi step	1 - 12	Reverse
Uptisphere® Strategy™	C18-2	L1	100 Å	425 m ² /g	C18 - octadecyl	mono-fonctionnel	19%	Multi step	1 - 10	Reverse
Uptisphere® Strategy™	RP	L1	100 Å	425 m ² /g	C18 - octadecyl	mono-fonctionnel	16%	one step hydrophilic	1.5 - 8	Reverse
Uptisphere® Strategy™	NEC	L1	100 Å	425 m ² /g	C18 - octadecyl	mono-fonctionnel	18%		1.5 - 7	Reverse
Uptisphere® Strategy™	PLP	L60	100 Å	425 m ² /g	Alkyl chain w/ polar group embedded	poly-fonctionnel	14%	Multi step	2.5 - 7.5	Reverse
Uptisphere® Strategy™	C12	L1	100 Å	425 m ² /g	C12 - dodecyl	mono-fonctionnel	16%	One step	1.5 - 8	Reverse
Uptisphere® Strategy™	RPX	L1	100 Å	425 m ² /g	Proprietary	mono-fonctionnel			1.5 - 7	Reverse
Uptisphere® Strategy™	C8-2	L7	100 Å	425 m ² /g	C8 - octyl	mono-fonctionnel	14%	One step	1.5 - 7	Reverse
Uptisphere® Strategy™	HILIC	L3	100 Å	425 m ² /g	Proprietary				1.5 - 7	Hilic
Uptisphere® Strategy™	SI	L3	100 Å	425 m ² /g	Silice				1.5 - 7	Normal
Uptisphere® Strategy™	NH2	L8	100 Å	425 m ² /g	NH2 - amino	mono-fonctionnel	4%		1.5 - 7	Reverse / Normal / Weak ion exchange
Uptisphere®	HSC	L1	n.a.	n.a.	C18 - octadecyl	mono-fonctionnel	20%	Multi step	1.5 - 8	Reverse
Uptisphere®	ODB	L1	120 Å	320 m ² /g	C18 - octadecyl	mono-fonctionnel	18%	One step	1.5 - 7	Reverse
Uptisphere®	HDO	L1	120 Å	320 m ² /g	C18 - octadecyl	mono-fonctionnel	17%	one step hydrophilic	1.5 - 7	Reverse
Uptisphere®	NEC	L1	120 Å	320 m ² /g	C18 - octadecyl	mono-fonctionnel	16%		1.5 - 6.5	Reverse
Uptisphere®	TF	L1	n.a.	n.a.	C18 - octadecyl	poly-fonctionnel	14%	One step	1.5 - 8	Reverse
Uptisphere®	PLP	L60	120 Å	320 m ² /g	Alkyl chain w/ polar group embedded	poly-fonctionnel	14%	Multi step	2.5 - 7.5	Reverse
Uptisphere®	PAH	L1	n.a.	n.a.	C18 - octadecyl	poly-fonctionnel	12%		1.5 - 7	Reverse
Uptisphere®	C8	L7	120 Å	320 m ² /g	C8 - octyl	mono-fonctionnel	11%	One step	2 - 7	Reverse
Uptisphere®	C8U	L7	120 Å	320 m ² /g	C8 - octyl	mono-fonctionnel	7%		2 - 6.5	Reverse
Uptisphere®	MM1	L44	120 Å	320 m ² /g	mixed mode RP/SCX	mono-fonctionnel			2 - 6.5	Reverse / Ion exchange
Uptisphere®	C4	L26	120 Å	320 m ² /g	C4 - butyl	mono-fonctionnel	7%	One step	2 - 7	Reverse
Uptisphere®	CN	L10	120 Å	320 m ² /g	CN - cyano	mono-fonctionnel	8%	One step	2 - 7	Reverse / Normal
Uptisphere®	PH	L11	120 Å	320 m ² /g	PH - phenyl	mono-fonctionnel	9%	One step	2 - 7	Reverse / Normal
Uptisphere®	DNAP	L12	120 Å	320 m ² /g	DNAP - dinitroanilido phenyl	mono-fonctionnel			2 - 6.5	Reverse / Normal
Uptisphere®	OH	L20	120 Å	320 m ² /g	OH - diol	mono-fonctionnel	6%		2 - 6.5	Reverse / Normal
Uptisphere®	SI	L3	120 Å	320 m ² /g	Silice				1.5 - 6.5	Normal
Uptisphere®	NH2	L8	120 Å	320 m ² /g	NH2 - amino	mono-fonctionnel	5%		2 - 6.5	Reverse / Normal / Weak ion exchange
Uptisphere®	SCX	L50	120 Å	320 m ² /g	SCX - strong cation exchanger	mono-fonctionnel			1 - 7.5	Ion exchange
Uptisphere®	SAX	L14	120 Å	320 m ² /g	SAX - strong anion exchanger	mono-fonctionnel			1 - 7.5	Ion exchange
Uptisphere® X-Serie	OD2	L1	n.a.	n.a.	C18 - octadecyl	poly-fonctionnel type II		Multi-step	1 - 13	Reverse
Uptisphere® X-Serie	C18	L1	n.a.	n.a.	C18 - octadecyl	poly-fonctionnel type II		Multi-step	1 - 13	Reverse
Uptisphere® X-Serie	C8	L7	n.a.	n.a.	C8 - octyl	poly-fonctionnel type II		Multi-step	1 - 13	Reverse
Uptisphere® X-Serie	C4	L26	n.a.	n.a.	C4 - butyl	poly-fonctionnel type II		Multi-step	1 - 13	Reverse
Uptisphere® 300Å	WOD	L1	300 Å	100 m ² /g	C18 - octadecyl	mono-fonctionnel	10%	One step	1.5 - 7	Reverse
Uptisphere® 300Å	PXP	L1	300 Å	100 m ² /g	C18 - octadecyl	poly-fonctionnel type I	8%	One step	1 - 10	Reverse
Uptisphere® 300Å	WC8	L7	300 Å	100 m ² /g	C8 - octyl	mono-fonctionnel	8%	One step	2 - 7	Reverse
Uptisphere® 300Å	WD8	L7	300 Å	100 m ² /g	C8 - octyl	poly-fonctionnel type I	8%	One step	1.5 - 8	Reverse
Uptisphere® 300Å	WC4	L26	300 Å	100 m ² /g	C4 - butyl	mono-fonctionnel	4%	One step	2 - 7	Reverse
Uptisphere® 300Å	WD4	L26	300 Å	100 m ² /g	C4 - butyl	poly-fonctionnel type I	4%	One step	1.5 - 8	Reverse
Uptisphere® 300Å	WT4	L26	300 Å	100 m ² /g	C4 - butyl	tri-fonctionnel	3%	One step	1.5 - 8	Reverse

The comparative data used in this brochure may not be representative of all applications

Uptisphere® NEC Strategy™ NEC

120Å - 320m²/g
3, 5, 10 & 15 µm

Bonding: C18
%C: 16
End-capping: none

pH stability: 1.5 to 6.5

NEC strongly retains the polar and mid-polar compounds. It overcome peak tailing with compounds that contains chains and/or carbon cycles combined with numerous polar

Uptisphere® PLP Strategy™ PLP

120Å - 320m²/g
3 & 5 µm

Bonding: Alkyl chain w/ polar group embedded
%C: 14
End-capping: multi-step

pH stability: 2.5 to 7.5

100% compatibility with aqueous mobile phases. Excellent peak symmetry with basic compounds. Very good retention of mid & non polar compounds

Uptisphere® Si Strategy™ Si

120Å - 320m²/g
3 & 5 µm

Bonding: Alkyl chain w/ polar group embedded
%C: 19
End-capping: multi-step

pH stability: 2.5 to 7.5

High Flow rate &

Uptisphere® MM1

120Å - 320m²/g
5 µm

Bonding: mixed mode - RP/SCX

End-capping: none

pH stability: 2.0 to 6.5

Ion exchange & hydrophobic chains are bonded onto the surface of the silica providing unique selectivity. Compounds that possess basic functionality are retained by ion exchange functionality. An appropriate pH, will elute ionizable molecules. An organic solvent elutes retained compounds that result from hydrophobic bonding.

Uptisphere® NH2

120Å - 320m²/g
3, 5, 10 & 15 µm

Bonding: amino
%C: 5

End-capping: none

pH stability: 2.0 to 6.5

Can be either weak anion exchangers for strong acids, or polar media that can interact with OH, NH, SH ...

Uptisphere® SCX

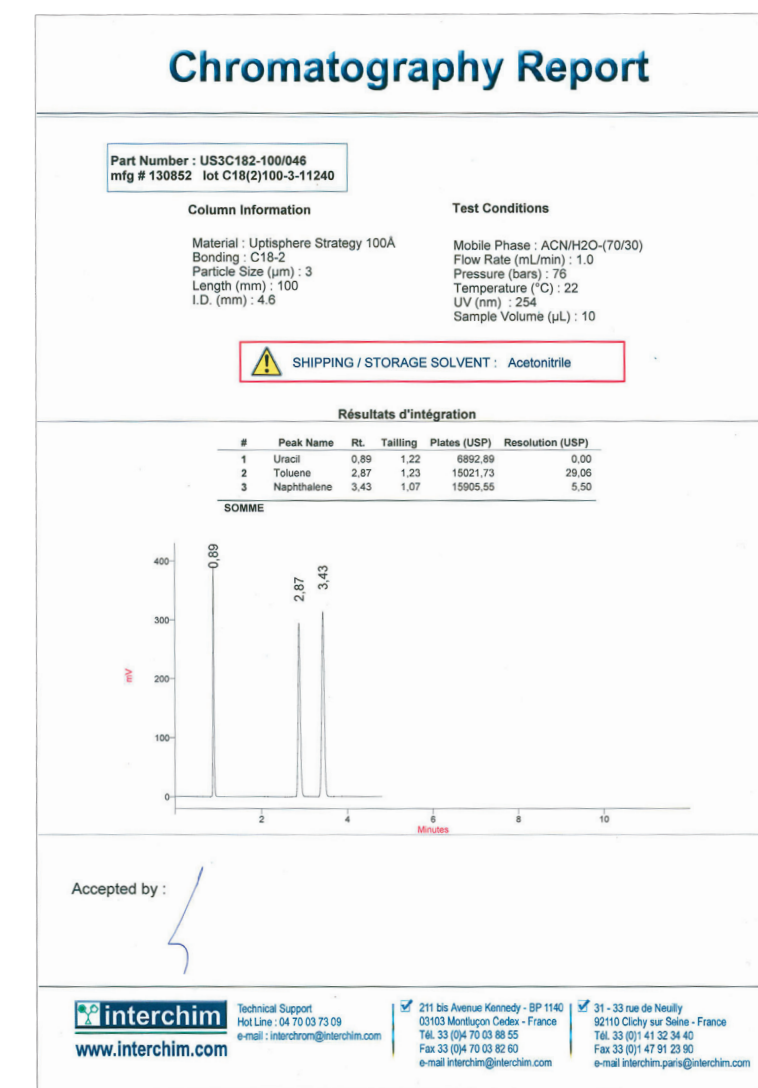
120Å - 320m²/g
5 & 10 µm

Bonding: Strong Cation Exchanger - SCX
End-capping: none

pH stability: 1.0 to 7.5

Strong cation exchange (SCX) contains sulfonic acid used to extract weak basic compounds which have one or more positive charges.

> Quality Control Report



> High Performance Hardware

