



# Surf — HPLC Columns

*im*Chem

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# Surf Columns

## Choosing imChem

A complete range of high quality columns for all chromatographic separations.

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**QUALITY**



**MADE IN  
FRANCE**

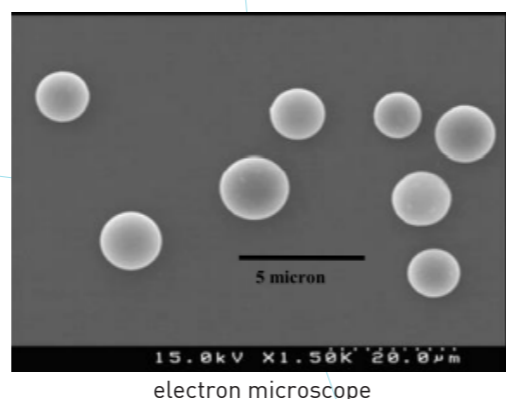
# Surf HPLC Columns

## Surf SILICA

The performance of the Surf columns comes firstly from the quality of the silica used.

### Spherical particles

The natural silica of the Surf columns is composed of homogeneously sized spherical particles.



### Very low metal content

As shown in the table, the Surf silica has a very low content in metal.

In the following pages, we have chosen to display our columns made from a 100A pore-sized silica, which is the ideal size for small molecules separation.

Our range also features other sizes of pores.

The specific surface of the Surf silica is 310m<sup>2</sup>/g for 100A.

- High number of theoretical plates per meter.
- Controlled separation, fine peak tailings and optimised analysis duration.

Specific Surface	310 m <sup>2</sup> /g
Pores volume	0.8 ml/g
Na in ppm	less than 10
Ti in ppm	less than 10
Ca in ppm	less than 10
Mg in ppm	less than 10
Al in ppm	less than 10
Fe in ppm	less than 10
Zr in ppm	less than 10

The narrow distribution of particle size, combined with a specific surface and an optimal pore volume allows for robust particles with excellent retention characteristics.

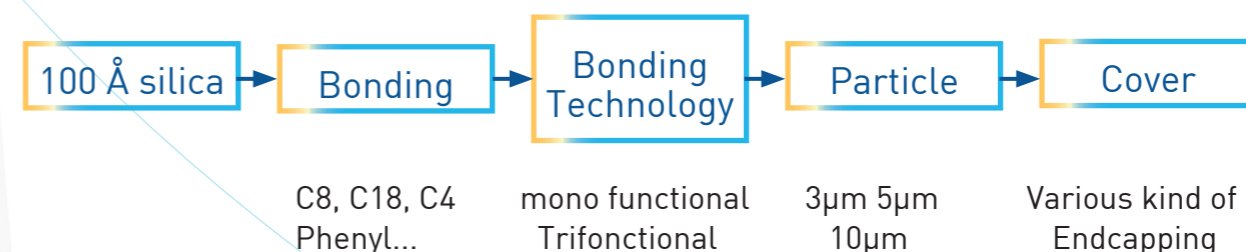
# Surf HPLC Columns

## A VERSATILE RANGE

Common denominator: the quality of the Surf ranges:

Long lifetime	Peak symmetry	Spherical particles	High purity	High specific surface	Acid-Basic Neutral
YES	YES	YES	YES	High	Compounds

With the Surf range, you can choose from varying bondings (C18 - C8 - C4 - C30 - Phenyl - Phenyl Hexyl), different bonding technologies (mono functional or trifunctional), various particle sizes, and multiple endcapping possibilities.



Our Surf, Surf WAX, Surf Polar, Surf TriF, Surf Polar TriF, Surf EXTREME and Surf AQ ranges come from combining different bonding types, bonding technologies and surface treatment.

# Surf HPLC Columns

## Surf COLUMNS RANGE

### Surf columns

High performance spherical silica, high purity, and low metal content for challenging applications.

The narrow distribution of particle size, combined with a specific surface and an optimal pore volume allows for robust particles with excellent retention characteristics.

- Excellent peak shape.
- Partition of acid, basic and neutral compounds in a single analysis.
- Excellent column lifetime.

**Normal endcapping for the surf range.**

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### Surf Polar columns

High performance spherical silica, high purity, and low metal content for challenging applications.

The narrow distribution of particle size, combined with a specific surface and an optimal pore volume allows for robust particles with excellent retention characteristics.

- Excellent peak shape.
- Partition of acid, basic and neutral compounds in a single analysis.
- Excellent column lifetime.

**No endcapping for our Surf Polar range, which is ideal for mixtures of complex polarity..**

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### Surf Wax columns

High performance spherical silica, high purity, and low metal content for challenging applications.

The narrow distribution of particle size, combined with a specific surface and an optimal pore volume allows for robust particles with excellent retention characteristics.

- Excellent peak shape.
- Partition of acid, basic and neutral compounds in a single analysis.
- Excellent column lifetime.

**High density endcapping for our Surf Wax range; deactivated for basic products to reduce peak tailings, offering a better loading capacity.**

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# Surf HPLC Columns

## Surf COLUMNS RANGE

### Surf TriF columns

Born from our last-generation bonding technology.

Controlled hydrophobia allowing shorter retention times than on a traditional bonding, to allow a faster analysis while consuming less mobile phase.

- Ideal for a mass spectrometry use, C18 trifunctional bonding.
- High robustness in extreme environments.
- Steric selectivity

**Normal endcapping for the Surf TriF range.**

---

### Surf Polar TriF columns

Born from our last-generation bonding technology.

Controlled hydrophobia allowing shorter retention times than on a traditional bonding, to allow a faster analysis while consuming less mobile phase.

- Ideal for a mass spectrometry use, C18 trifunctional bonding.
- High robustness in extreme environments.
- Steric selectivity

**No endcapping for our Surf Polar TriF range, which is ideal for mixtures of complex polarity.**

---

### Surf Extreme columns

Born from our last-generation bonding technology.

Controlled hydrophobia allowing shorter retention times than on a traditional bonding, to allow a faster analysis while consuming less mobile phase.

- Ideal for a mass spectrometry use, C18 trifunctional bonding.
- High robustness in extreme environments.
- Steric selectivity

**High density endcapping for our Surf Extreme range, allowing work on a large pH range, from 1 to 10.**

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### Surf AQ columns

Stable from 100% of organic phase to 100% of aqueous phase.

The Surf AQ column possesses an extremely stable bonding phase which permits the use of a single column in diverse mobile phase conditions. You can easily work in highly organic or highly aqueous conditions.

- Available in a wide selection of column formats.
  - Long column lifetime.
  - Excellent retention of polar analytes with 100% aqueous mobile phases.
  - High retention of hydrophobic analytes with 100% organic mobile phases.
-

# Surf HPLC Columns

## Surf COLUMNS RANGE



# Surf HPLC Columns

## Surf COLUMNS RANGE

### Characteristics

Phase	Mono-Functional / Tri-Functional	End-capped
Surf	M	YES
Surf Wax	M	HIGH DENSITY
Surf Polar	M	NO
Surf TriF	T	YES
Surf Polar TriF	T	NO
Surf Extreme	T	HIGH DENSITY
Surf AQ	M	YES

Phase	Hydrophobicity	Hydrophobic retention	Hydrophilic	Very hydrophilic	Acids	Bases
Surf	••	•••	••	•	••	••
Surf Wax	•••	•••	••	•	•••	•••
Surf Polar	••	••	••	•	•	•
Surf TriF	••	••	•••	•••	•	•
Surf Polar TriF	•••	•••	••	••	••	••
Surf Extreme	•••	•••	•	•	•••	•••
Surf AQ	••	••	••	••	••	••

Because of their various selectivities, our Surf ranges can be used to perform all of the challenges faced by a chromatographer:

You wish to	Opt for
Analyse acid, basic and neutral compounds in a single analysis.	Surf
Analyse complex polar mixes.	Surf Polar
Analyse basic compounds.	Surf Wax
Find a column with higher robustness, shorter analysis time, sparing of mobile phase.	Surf TriF
Analyse mixes with complex polarities.	Surf Polar
Use a mobile phase with wide pH range (1 to 10)	Surf Extreme
Work from 100% aqueous phase to 100% organic phase	Surf AQ
Analyse polar compounds in 100% aqueous phases	
Analyse hydrophobic compounds in 100% organic phases	

# Surf HPLC Columns

## HARDWARE

The surf range comes in the following dimensions :

Ø 4,6	Ø 4,0	Ø 3,0	Ø 2,1
250 x 4,6mm	250 x 4,0mm	-	-
200 x 4,6mm	-	-	-
150 x 4,6mm	150 x 4,0mm	150 x 3,0mm	-
125 x 4,6mm	125 x 4,0mm	125 x 3,0mm	-
100 x 4,6mm	-	100 x 3,0mm	100 x 2,1mm
50 x 4,6mm	50 x 4,0mm	-	50 x 2,1mm
33 x 4,6mm	-	-	-

Upon request, we can provide Surf Columns for **semi-preparative mode** applications

**Do not hesitate to contact us.**

These various column sizes allow you to find the best compromise between separation quality and analysis duration.



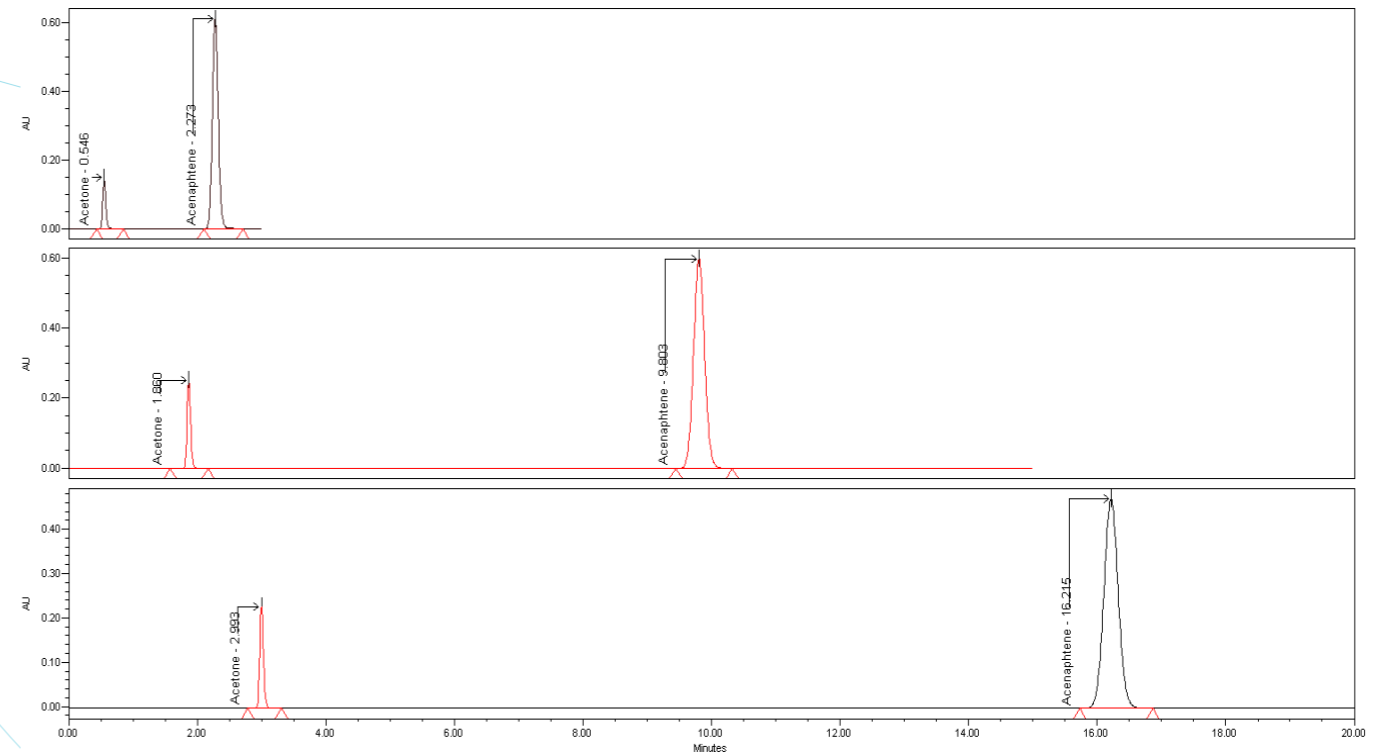
# Surf HPLC Columns

## HARDWARE

Comparison of the various lengths of Surf C18 Extreme 5µm :

Ø 4.6x33mm, Ø 4.6x150mm and Ø 4.6x250mm.

(Same number of plate/meter for Acenaphthene)



**Analysis conditions:**

Mobile phase : H<sub>2</sub>O/ACN (30:70) - 1ml/min

Detector : UV 254nm

# Surf HPLC Columns

## ROBUSTNESS

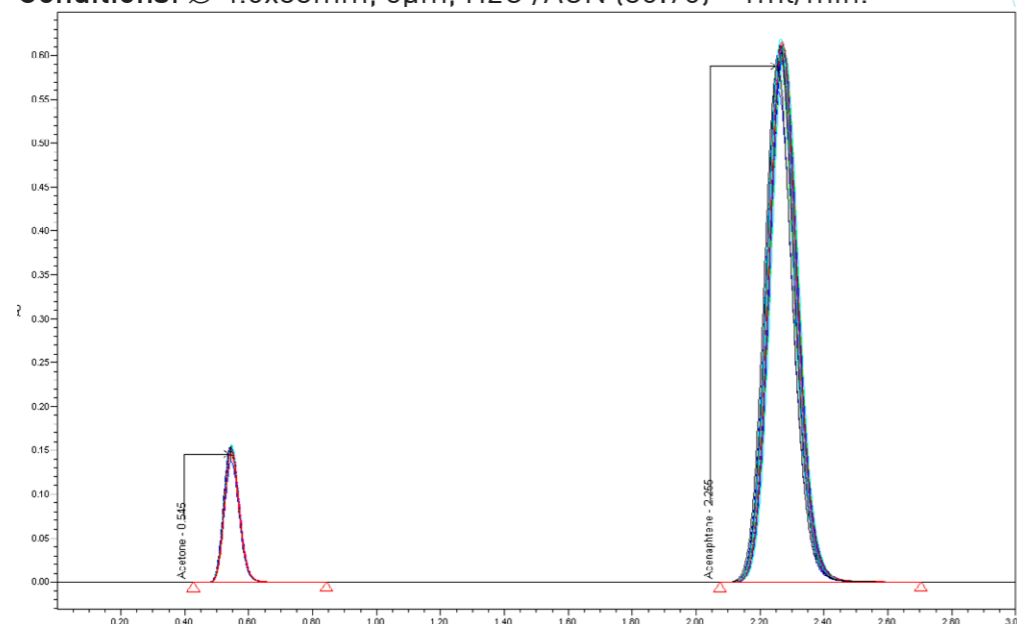
Surf C18 Extreme 100A, 5µm

Réf: 3346-5-SU-C18EX

76 consecutive injections with testing mix.

(Same number of plate/meters for Acenaphtene)

Conditions: Ø 4.6x33mm, 5µm, H2O /ACN (30:70) - 1ml/min.



Acenaphtene compound						
# vial	Sample	Retention	Area	K Prime	Resolution	USP Tailing
1	Repet E 2C	2.277	3826119	3.55	13.72	1.09
2	Repet E 2C	2.271	3830313	3.54	13.66	1.09
3	Repet E 2C	2.272	3821799	3.54	13.66	1.1
4	Repet E 2C	2.271	3802531	3.54	13.66	1.1
5	Repet E 2C	2.269	3806885	3.54	13.59	1.1
⋮						
70	Repet E 2C	2.264	3873111	3.53	13.62	1.1
71	Repet E 2C	2.263	3848321	3.53	13.63	1.11
72	Repet E 2C	2.27	3902943	3.54	13.65	1.1
73	Repet E 2C	2.272	3871409	3.54	13.68	1.11
74	Repet E 2C	2.273	3885892	3.55	13.65	1.1
75	Repet E 2C	2.255	3748885	3.51	13.48	1.11
76	Repet E 2C	2.265	3915289	3.53	13.64	1.1
Mean		2.266	3828694.7	3.5	13.6	1.1
Std. Dev.		0.004	44789.9	0	0	0
% RSD		0.18	1.2	0.2	0.3	0.6

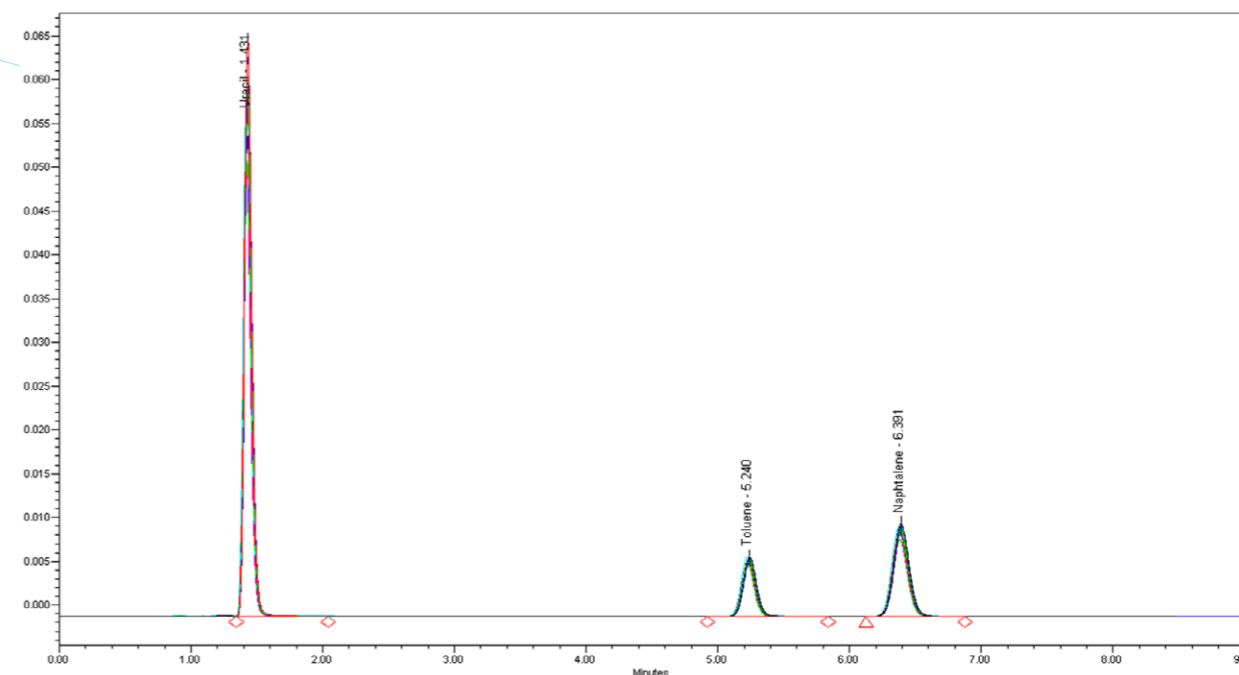
# Surf HPLC Columns

## PH

Surf C18 Extreme 100 A 5µm. P/N : 15046-5-SU-C18EX

Superposition of ten pH 9 injections

Conditions: Ø 4.6x33mm 5µm - H<sub>2</sub>O 10mM AmAc PH9 [NaOH] / ACN 30/70 - 1ml/min - 254mm.



#	Sample	Vial	Inj	Name	Retention	Resolution	USP Plate Count	USP Tailing
					Time (min)			
1	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.391	5.9	14339.09	1.07
2	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.386	5.91	14247.19	1.06
3	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.375	5.92	14252.29	1.06
4	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.391	5.91	14370.25	1.06
5	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.381	5.9	14334.26	1.06
6	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.395	5.88	14386.84	1.07
7	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.393	5.89	14269.44	1.07
8	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.381	5.96	14436.09	1.05
9	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.384	5.93	14497.4	1.06
10	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.392	5.9	14240.95	1.07
11	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.391	5.87	14103.86	1.07
12	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.383	5.93	14427.93	1.06
13	E 3C 20 mM FoAc pH 9	10	1	Naphtalene	6.389	5.89	14331.66	1.07
Mean					6.387	5.9	14325.9	1.1
Std. Dev.					0.006	0	103.8	0
% RSD					0.09	0.4	0.7	0.5

# Surf HPLC Columns

## EFFICIENCY

Thanks to our filling technology, Surf columns show high efficiency, with about 100 000 theoretical plates per meter.

Name	Retention time	K Prime	USP Resolution	USP Tailing	USP Plate Count
Acenaphtene	9.499	18	36.93	1.01	15127

Typical results with a Surf Extreme 150x4.6mm 5µm.

# Surf HPLC Columns

## APPLICATION NOTES

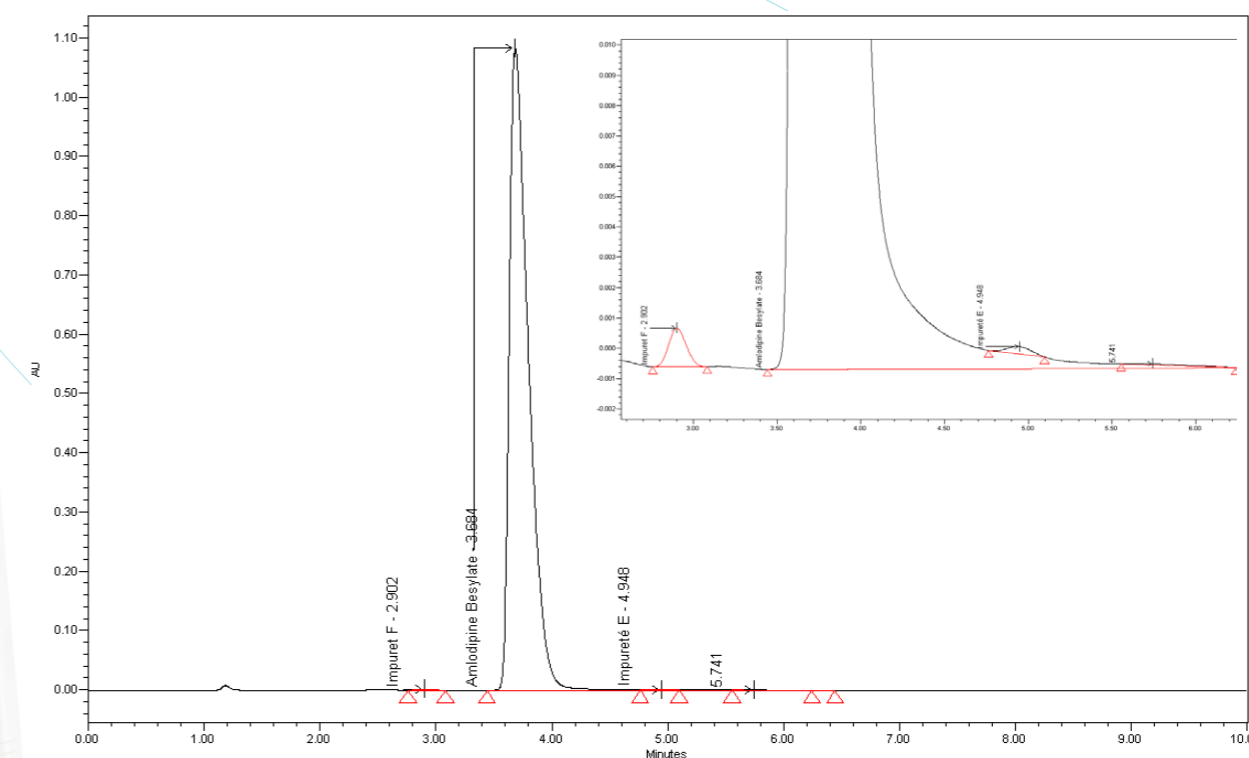
Surf C18 Extreme 100 A 5µm. P/N : 15046-5-SU-C18EX

Amlodipine besylate sample (EP 1491 Method).

### Conditions:

Ø 4.6x150mm 5µm - H<sub>2</sub>O AmAc / MeOH (30:70) - 1.5ml/min - 237 nm - Pressure 2000 psi. (EP 1491).

Peak Name	RT	(µV.sec)	% Area	K Prime	USP Tailing
Impureté F	2.902	9289	0.07	2.87	1.1
Amlodipine Besylate	3.684	12455696	99.9	3.91	1.91
Impureté E	4.948	2400	0.02	5.6	





# Surf HPLC Columns

## Surf C18

### Surf columns



High performance spherical silica, high purity, and low metal content for challenging applications.

The narrow distribution of particle size, combined with a specific surface and an optimal pore volume allows for robust particles with excellent retention characteristics.

- Excellent peak shape.
- Partition of acid, basic and neutral compounds in a single analysis.
- Excellent column lifetime.

### Our range includes three distinct selectivities:

- Normal endcapping for our **Surf** range.
- High density endcapping for our **Surf Wax** range; deactivated for basic products to reduce peak tailings, offering a better loading capacity.
- No endcapping for our **Surf Polar** range, which is ideal for mixtures of complex polarity.

# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation
<b>Surf C18 100A 5µm</b>			
<b>Ø4.6mm</b>			
25046-5-SU-C18	Surf C18 100A 5µm 250x4,6mm	G1046-5-SUC18	Surf Guard columns C18 100A 5µm 10x4,6mm 3/ pk
20046-5-SU-C18	Surf C18 100A 5µm 200x4,6mm		
15046-5-SU-C18	Surf C18 100A 5µm 150x4,6mm		
12546-5-SU-C18	Surf C18 100A 5µm 125x4,6mm		
10046-5-SU-C18	Surf C18 100A 5µm 100x4,6mm		
7546-5-SU-C18	Surf C18 100A 5µm 75x4,6mm		
5046-5-SU-C18	Surf C18 100A 5µm 50x4,6mm		
3346-5-SU-C18	Surf C18 100A 5µm 33x4,6mm		
<b>Ø4.0mm</b>			
25040-5-SU-C18	Surf C18 100A 5µm 250x4,0mm	G1040-5-SUC18	Surf Guard columns C18 100A 5µm 10x4,0mm 3/ pk
15040-5-SU-C18	Surf C18 100A 5µm 150x4,0mm		
12540-5-SU-C18	Surf C18 100A 5µm 125x4,0mm		
5040-5-SU-C18	Surf C18 100A 5µm 50x4,0mm		
<b>Ø3.0mm</b>			
15030-5-SU-C18	Surf C18 100A 5µm 150x3,0mm	G1030-5-SUC18	Surf Guard columns C18 100A 5µm 10x3,0mm 3/ pk
12530-5-SU-C18	Surf C18 100A 5µm 125x3,0mm		
10030-5-SU-C18	Surf C18 100A 5µm 100x3,0mm		
<b>Ø2.1mm</b>			
10021-5-SU-C18	Surf C18 100A 5µm 100x2,1mm	G1021-5-SUC18	Surf Guard columns C18 100A 5µm 10x2,1mm 3/ pk
5021-5-SU-C18	Surf C18 100A 5µm 50x2,1mm		

(1)

### Surf C18 100A 3µm

<b>Ø4.6mm</b>			
15046-3-SU-C18	Surf C18 100A 3µm 150x4,6mm	G1046-3-SUC18	Surf Guard columns C18 100A 3µm 10x4,6mm 3/ pk
12546-3-SU-C18	Surf C18 100A 3µm 125x4,6mm		
10046-3-SU-C18	Surf C18 100A 3µm 100x4,6mm		
7546-3-SU-C18	Surf C18 100A 3µm 75x4,6mm		
5046-3-SU-C18	Surf C18 100A 3µm 50x4,6mm		
3346-3-SU-C18	Surf C18 100A 3µm 33x4,6mm		
<b>Ø4.0mm</b>			
15040-3-SU-C18	Surf C18 100A 3µm 150x4,0mm	G1040-3-SUC18	Surf Guard columns C18 100A 3µm 10x4,0mm 3/ pk
12540-3-SU-C18	Surf C18 100A 3µm 125x4,0mm		
5040-3-SU-C18	Surf C18 100A 3µm 50x4,0mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C18 100A 3µm

Ø3.0mm			
15030-3-SU-C18	Surf C18 100A 3µm 150x3,0mm	G1030-3-SUC18	Surf Guard columns C18 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C18	Surf C18 100A 3µm 125x3,0mm		
10030-3-SU-C18	Surf C18 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C18	Surf C18 100A 3µm 100x2,1mm	G1021-3-SUC18	Surf Guard columns C18 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C18	Surf C18 100A 3µm 50x2,1mm		

(1)

### Surf C18 Polar 100A 5µm

Ø4.6mm			
25046-5-SU-C18P	Surf C18 Polar 100A 5µm 250x4,6mm	G1046-5-SUC18P	Surf Guard columns C18 Polar 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C18P	Surf C18 Polar 100A 5µm 200x4,6mm		
15046-5-SU-C18P	Surf C18 Polar 100A 5µm 150x4,6mm		
12546-5-SU-C18P	Surf C18 Polar 100A 5µm 125x4,6mm		
10046-5-SU-C18P	Surf C18 Polar 100A 5µm 100x4,6mm		
7546-5-SU-C18P	Surf C18 Polar 100A 5µm 75x4,6mm		
5046-5-SU-C18P	Surf C18 Polar 100A 5µm 50x4,6mm		
3346-5-SU-C18P	Surf C18 Polar 100A 5µm 55x4,6mm		
Ø4.0mm			
25040-5-SU-C18P	Surf C18 Polar 100A 5µm 250x4,0mm	G1040-5-SUC18P	Surf Guard columns C18 Polar 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C18P	Surf C18 Polar 100A 5µm 150x4,0mm		
12540-5-SU-C18P	Surf C18 Polar 100A 5µm 100x3,0mm		
5040-5-SU-C18P	Surf C18 Polar 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C18P	Surf C18 Polar 100A 5µm 150x3,0mm	G1030-5-SUC18P	Surf Guard columns C18 Polar 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C18P	Surf C18 Polar 100A 5µm 125x3,0mm		
10030-5-SU-C18P	Surf C18 Polar 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C18P	Surf C18 Polar 100A 5µm 100x2,1mm	G1021-5-SUC18P	Surf Guard columns C18 Polar 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C18P	Surf C18 Polar 100A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C18 Polar 100A 3µm

Ø4.6mm			
15046-3-SU-C18P	Surf C18 Polar 100A 3µm 150x4,6mm	G1046-3-SUC18P	Surf Guard columns C18 Polar 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C18P	Surf C18 Polar 100A 3µm 125x4,6mm		
10046-3-SU-C18P	Surf C18 Polar 100A 3µm 100x4,6mm		
7546-3-SU-C18P	Surf C18 Polar 100A 3µm 75x4,6mm		
5046-3-SU-C18P	Surf C18 Polar 100A 3µm 50x4,6mm		
3346-3-SU-C18P	Surf C18 Polar 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C18P	Surf C18 Polar 100A 3µm 150x4,0mm	G1040-3-SUC18P	Surf Guard columns C18 Polar 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C18P	Surf C18 Polar 100A 3µm 100x3,0mm		
5040-3-SU-C18P	Surf C18 Polar 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C18P	Surf C18 Polar 100A 3µm 150x3,0mm	G1030-3-SUC18P	Surf Guard columns C18 Polar 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C18P	Surf C18 Polar 100A 3µm 125x3,0mm		
10030-3-SU-C18P	Surf C18 Polar 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C18P	Surf C18 Polar 100A 3µm 100x2,1mm	G1021-3-SUC18P	Surf Guard columns C18 Polar 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C18P	Surf C18 Polar 100A 3µm 50x2,1mm		

(1)

### Surf C18 Wax 100A 5µm

Ø4.6mm			
25046-5-SU-C18W	Surf C18 Wax 100A 5µm 250x4,6mm	G1046-5-SUC18W	Surf Guard columns C18 Wax 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C18W	Surf C18 Wax 100A 5µm 200x4,6mm		
15046-5-SU-C18W	Surf C18 Wax 100A 5µm 150x4,6mm		
12546-5-SU-C18W	Surf C18 Wax 100A 5µm 125x4,6mm		
10046-5-SU-C18W	Surf C18 Wax 100A 5µm 100x4,6mm		
7546-5-SU-C18W	Surf C18 Wax 100A 5µm 75x4,6mm		
5046-5-SU-C18W	Surf C18 Wax 100A 5µm 50x4,6mm		
3346-5-SU-C18W	Surf C18 Wax 100A 5µm 33x4,6mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C18 Wax 100A 5µm

Ø4.0mm			
25040-5-SU-C18W	Surf C18 Wax 100A 5µm 250x4,0mm	G1040-5-SUC18W	Surf Guard columns C18 Wax 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C18W	Surf C18 Wax 100A 5µm 150x4,0mm		
12540-5-SU-C18W	Surf C18 Wax 100A 5µm 125x4,0mm		
5040-5-SU-C18W	Surf C18 Wax 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C18W	Surf C18 Wax 100A 5µm 150x3,0mm	G1030-5-SUC18W	Surf Guard columns C18 Wax 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C18W	Surf C18 Wax 100A 5µm 125x3,0mm		
10030-5-SU-C18W	Surf C18 Wax 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C18W	Surf C18 Wax 100A 5µm 100x2,1mm	G1021-5-SUC18W	Surf Guard columns C18 Wax 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C18W	Surf C18 Wax 100A 5µm 50x2,1mm		

(1)

### Surf C18 Wax 100A 3µm

Ø4.6mm			
15046-3-SU-C18W	Surf C18 Wax 100A 3µm 150x4,6mm	G1046-3-SUC18W	Surf Guard columns C18 Wax 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C18W	Surf C18 Wax 100A 3µm 125x4,6mm		
10046-3-SU-C18W	Surf C18 Wax 100A 3µm 100x4,6mm		
7546-3-SU-C18W	Surf C18 Wax 100A 3µm 75x4,6mm		
5046-3-SU-C18W	Surf C18 Wax 100A 3µm 50x4,6mm		
3346-3-SU-C18W	Surf C18 Wax 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C18W	Surf C18 Wax 100A 3µm 150x4,0mm	G1040-3-SUC18W	Surf Guard columns C18 Wax 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C18W	Surf C18 Wax 100A 3µm 125x4,0mm		
5040-3-SU-C18W	Surf C18 Wax 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C18W	Surf C18 Wax 100A 3µm 150x3,0mm	G1030-3-SUC18W	Surf Guard columns C18 Wax 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C18W	Surf C18 Wax 100A 3µm 125x3,0mm		
10030-3-SU-C18W	Surf C18 Wax 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C18W	Surf C18 Wax 100A 3µm 100x2,1mm	G1021-3-SUC18W	Surf Guard columns C18 Wax 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C18W	Surf C18 Wax 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## Notes

# Surf HPLC Columns

## Surf TriF C18

### Surf TriF Columns



Born from our last-generation bonding technology.

Controlled hydrophobia allowing shorter retention times than on a traditional bonding, to allow a faster analysis while consuming less mobile phase.

- Ideal for a mass spectrometry use, C18 trifunctional bonding.
- High robustness in extreme environments.
- Steric selectivity.

### Our range includes three distinct selectivities:

- Normal encapping for our Surf TriF range,
- No endcapping for our Surf Polar range, ideal for mixtures of complex polarity,
- High density endcapping for our Surf Extreme range, allowing work on a large pH range, from 1 to 10.



# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation
<b>Surf C18 TriF 100A 5µm</b>			
<b>Ø4.6mm</b>			
25046-5-SU-C18T	Surf C18 TriF 100A 5µm 250x4,6mm	G1046-5-SUC18T	Surf Guard columns C18 Trif 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C18T	Surf C18 TriF 100A 5µm 200x4,6mm		
15046-5-SU-C18T	Surf C18 TriF 100A 5µm 150x4,6mm		
12546-5-SU-C18T	Surf C18 TriF 100A 5µm 125x4,6mm		
10046-5-SU-C18T	Surf C18 TriF 100A 5µm 100x4,6mm		
7546-5-SU-C18T	Surf C18 TriF 100A 5µm 75x4,6mm		
5046-5-SU-C18T	Surf C18 TriF 100A 5µm 50x4,6mm		
3346-5-SU-C18T	Surf C18 TriF 100A 5µm 33x4,6mm		
<b>Ø4.0mm</b>			
25040-5-SU-C18T	Surf C18 TriF 100A 5µm 250x4,0mm	G1040-5-SUC18T	Surf Guard columns C18 Trif 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C18T	Surf C18 TriF 100A 5µm 150x4,0mm		
12540-5-SU-C18T	Surf C18 TriF 100A 5µm 125x4,0mm		
5040-5-SU-C18T	Surf C18 TriF 100A 5µm 50x4,0mm		
<b>Ø3.0mm</b>			
15030-5-SU-C18T	Surf C18 TriF 100A 5µm 150x3,0mm	G1030-5-SUC18T	Surf Guard columns C18 Trif 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C18T	Surf C18 TriF 100A 5µm 125x3,0mm		
10030-5-SU-C18T	Surf C18 TriF 100A 5µm 100x3,0mm		
<b>Ø2.1mm</b>			
10021-5-SU-C18T	Surf C18 TriF 100A 5µm 100x2,1mm	G1021-5-SUC18T	Surf Guard columns C18 Trif 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C18T	Surf C18 TriF 100A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C18 TriF 100A 3µm

Ø4.6mm			
15046-3-SU-C18T	Surf C18 TriF 100A 3µm 150x4,6mm	G1046-3-SUC18T	Surf Guard columns C18 Trif 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C18T	Surf C18 TriF 100A 3µm 125x4,6mm		
10046-3-SU-C18T	Surf C18 TriF 100A 3µm 100x4,6mm		
7546-3-SU-C18T	Surf C18 TriF 100A 3µm 75x4,6mm		
5046-3-SU-C18T	Surf C18 TriF 100A 3µm 50x4,6mm		
3346-3-SU-C18T	Surf C18 TriF 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C18T	Surf C18 TriF 100A 3µm 150x4,0mm	G1040-3-SUC18T	Surf Guard columns C18 Trif 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C18T	Surf C18 TriF 100A 3µm 125x4,0mm		
5040-3-SU-C18T	Surf C18 TriF 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C18T	Surf C18 TriF 100A 3µm 150x3,0mm	G1030-3-SUC18T	Surf Guard columns C18 Trif 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C18T	Surf C18 TriF 100A 3µm 125x3,0mm		
10030-3-SU-C18T	Surf C18 TriF 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C18T	Surf C18 TriF 100A 3µm 100x2,1mm	G1021-3-SUC18T	Surf Guard columns C18 Trif 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C18T	Surf C18 TriF 100A 3µm 50x2,1mm		

(1)

### Surf C18 Polar TriF 100A 5µm

Ø4.6mm			
25046-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 250x4,6mm	G1046-5-SUC18PT	Surf Guard columns C18 Polar Trif 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 200x4,6mm		
15046-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 150x4,6mm		
12546-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 125x4,6mm		
10046-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 100x4,6mm		
7546-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 75x4,6mm		
5046-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 50x4,6mm		
3346-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 33x4,6mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C18 Polar TriF 100A 5µm

Ø4.0mm			
25040-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 250x4,0mm	G1040-5-SUC18PT	Surf Guard columns C18 Polar Trif 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 150x4,0mm		
12540-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 125x4,0mm		
5040-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 150x3,0mm	G1030-5-SUC18PT	Surf Guard columns C18 Polar Trif 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 125x3,0mm		
10030-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 100x2,1mm	G1021-5-SUC18PT	Surf Guard columns C18 Polar Trif 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C18PT	Surf C18 Polar TriF 100A 5µm 50x2,1mm		

(1)

### Surf C18 Polar TriF 100A 3µm

Ø4.6mm			
15046-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 150x4,6mm	G1046-3-SUC18PT	Surf Guard columns C18 Polar Trif 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 125x4,6mm		
10046-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 100x4,6mm		
7546-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 75x4,6mm		
5046-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 50x4,6mm		
3346-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 150x4,0mm	G1040-3-SUC18PT	Surf Guard columns C18 Polar Trif 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 125x4,0mm		
5040-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 150x3,0mm	G1030-3-SUC18PT	Surf Guard columns C18 Polar Trif 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 125x3,0mm		
10030-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 100x2,1mm	G1021-3-SUC18PT	Surf Guard columns C18 Polar Trif 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C18PT	Surf C18 Polar TriF 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C18 Extreme 100A 5µm

Ø4.6mm			
25046-5-SU-C18EX	Surf C18 Extreme 100A 5µm 250x4,6mm	G1046-5-SUC18EX	Surf Guard columns C18 Extreme 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C18EX	Surf C18 Extreme 100A 5µm 200x4,6mm		
15046-5-SU-C18EX	Surf C18 Extreme 100A 5µm 150x4,6mm		
12546-5-SU-C18EX	Surf C18 Extreme 100A 5µm 125x4,6mm		
10046-5-SU-C18EX	Surf C18 Extreme 100A 5µm 100x4,6mm		
7546-5-SU-C18EX	Surf C18 Extreme 100A 5µm 75x4,6mm		
5046-5-SU-C18EX	Surf C18 Extreme 100A 5µm 50x4,6mm		
3346-5-SU-C18EX	Surf C18 Extreme 100A 5µm 33x4,6mm		
Ø4.0mm			
25040-5-SU-C18EX	Surf C18 Extreme 100A 5µm 250x4,0mm	G1040-5-SUC18EX	Surf Guard columns C18 Extreme 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C18EX	Surf C18 Extreme 100A 5µm 150x4,0mm		
12540-5-SU-C18EX	Surf C18 Extreme 100A 5µm 125x4,0mm		
5040-5-SU-C18EX	Surf C18 Extreme 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C18EX	Surf C18 Extreme 100A 5µm 150x3,0mm	G1030-5-SUC18EX	Surf Guard columns C18 Extreme 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C18EX	Surf C18 Extreme 100A 5µm 125x3,0mm		
10030-5-SU-C18EX	Surf C18 Extreme 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C18EX	Surf C18 Extreme 100A 5µm 100x2,1mm	G1021-5-SUC18EX	Surf Guard columns C18 Extreme 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C18EX	Surf C18 Extreme 100A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C18 Extreme 100A 3µm

Ø4.6mm			
15046-3-SU-C18EX	Surf C18 Extreme 100A 3µm 150x4,6mm	G1046-3-SUC18EX	Surf Guard columns C18 Extreme 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C18EX	Surf C18 Extreme 100A 3µm 125x4,6mm		
10046-3-SU-C18EX	Surf C18 Extreme 100A 3µm 100x4,6mm		
7546-3-SU-C18EX	Surf C18 Extreme 100A 3µm 75x4,6mm		
5046-3-SU-C18EX	Surf C18 Extreme 100A 3µm 50x4,6mm		
3346-3-SU-C18EX	Surf C18 Extreme 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C18EX	Surf C18 Extreme 100A 3µm 150x4,0mm	G1040-3-SUC18EX	Surf Guard columns C18 Extreme 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C18EX	Surf C18 Extreme 100A 3µm 125x4,0mm		
5040-3-SU-C18EX	Surf C18 Extreme 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C18EX	Surf C18 Extreme 100A 3µm 150x3,0mm	G1030-3-SUC18EX	Surf Guard columns C18 Extreme 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C18EX	Surf C18 Extreme 100A 3µm 125x3,0mm		
10030-3-SU-C18EX	Surf C18 Extreme 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C18EX	Surf C18 Extreme 100A 3µm 100x2,1mm	G1021-3-SUC18EX	Surf Guard columns C18 Extreme 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C18EX	Surf C18 Extreme 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## Surf AQ C18

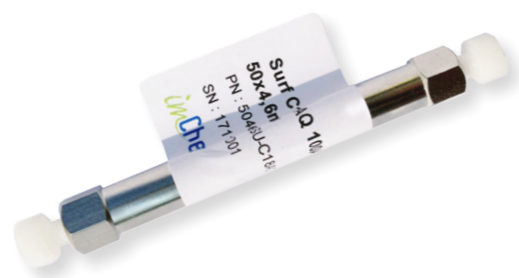
### Surf AQ Columns



Stable from 100% of organic phase to 100% of aqueous phase.

The Surf AQ column possesses an extremely stable bonding phase which permits the use of a single column in diverse mobile phase conditions. You can easily work in highly organic or highly aqueous conditions.

- Available in a wide selection of column formats.
- Long column lifetime.
- Excellent retention of polar analytes with 100% aqueous mobile phases.
- High retention of hydrophobic analytes with 100% organic mobile phases.



# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation
<b>Surf C18 AQ 100A 5µm</b>			
<b>Ø4.6mm</b>			
25046-5-SU-C18AQ	Surf C18 AQ 100A 5µm 250x4,6mm	G1046-5-SUC18AQ	Surf Guard columns C18 AQ 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C18AQ	Surf C18 AQ 100A 5µm 200x4,6mm		
15046-5-SU-C18AQ	Surf C18 AQ 100A 5µm 150x4,6mm		
12546-5-SU-C18AQ	Surf C18 AQ 100A 5µm 125x4,6mm		
10046-5-SU-C18AQ	Surf C18 AQ 100A 5µm 100x4,6mm		
7546-5-SU-C18AQ	Surf C18 AQ 100A 5µm 75x4,6mm		
5046-5-SU-C18AQ	Surf C18 AQ 100A 5µm 50x4,6mm		
3346-5-SU-C18AQ	Surf C18 AQ 100A 5µm 33x4,6mm		
<b>Ø4.0mm</b>			
25040-5-SU-C18AQ	Surf C18 AQ 100A 5µm 250x4,0mm	G1040-5-SUC18AQ	Surf Guard columns C18 AQ 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C18AQ	Surf C18 AQ 100A 5µm 150x4,0mm		
12540-5-SU-C18AQ	Surf C18 AQ 100A 5µm 125x4,0mm		
5040-5-SU-C18AQ	Surf C18 AQ 100A 5µm 50x4,0mm		
<b>Ø3.0mm</b>			
15030-5-SU-C18AQ	Surf C18 AQ 100A 5µm 150x3,0mm	G1030-5-SUC18AQ	Surf Guard columns C18 AQ 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C18AQ	Surf C18 AQ 100A 5µm 125x3,0mm		
10030-5-SU-C18AQ	Surf C18 AQ 100A 5µm 100x3,0mm		
<b>Ø2.1mm</b>			
10021-5-SU-C18AQ	Surf C18 AQ 100A 5µm 100x2,1mm	G1021-5-SUC18AQ	Surf Guard columns C18 AQ 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C18AQ	Surf C18 AQ 100A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

# Surf HPLC Columns

## To Order

## Notes

### Surf C18 AQ 100A 3µm

Ø4.6mm			
15046-3-SU-C18AQ	Surf C18 AQ 100A 3µm 150x4,6mm	G1046-3-SUC18AQ	Surf Guard columns C18 AQ 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C18AQ	Surf C18 AQ 100A 3µm 125x4,6mm		
10046-3-SU-C18AQ	Surf C18 AQ 100A 3µm 100x4,6mm		
7546-3-SU-C18AQ	Surf C18 AQ 100A 3µm 75x4,6mm		
5046-3-SU-C18AQ	Surf C18 AQ 100A 3µm 50x4,6mm		
3346-3-SU-C18AQ	Surf C18 AQ 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C18AQ	Surf C18 AQ 100A 3µm 150x4,0mm	G1040-5-SUC18AQ	Surf Guard columns C18 AQ 100A 5µm 10x4,0mm 3/pk
12540-3-SU-C18AQ	Surf C18 AQ 100A 3µm 125x4,0mm		
5040-3-SU-C18AQ	Surf C18 AQ 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C18AQ	Surf C18 AQ 100A 3µm 150x3,0mm	G1030-5-SUC18AQ	Surf Guard columns C18 AQ 100A 5µm 10x3,0mm 3/pk
12530-3-SU-C18AQ	Surf C18 AQ 100A 3µm 125x3,0mm		
10030-3-SU-C18AQ	Surf C18 AQ 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C18AQ	Surf C18 AQ 100A 3µm 100x2,1mm	G1021-5-SUC18AQ	Surf Guard columns C18 AQ 100A 5µm 10x2,1mm 3/pk
5021-3-SU-C18AQ	Surf C18 AQ 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.





# Surf HPLC Columns

## Surf C8

### Surf Columns



High performance spherical natural silica, high purity, and low metal content for challenging applications.

The narrow distribution of particle size, combined with a specific surface and an optimal pore volume allows for robust particles with excellent retention characteristics.

- Excellent peak shape.
- Partition of acid, basic and neutral compounds in a single analysis.
- Excellent column lifetime.

### Our range includes three distinct selectivities:

- Normal endcapping for our **Surf** range.
- No endcapping for our **Surf Polar** range, which is ideal for mixtures of complex polarity.
- High density endcapping for our **Surf Wax** range; deactivated for basic products to reduce peak tailings, offering a better loading capacity.

# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation
<b>Surf C8 100A 5µm</b>			
<b>Ø4.6mm</b>			
25046-5-SU-C8	Surf C8 100A 5µm 250x4,6mm	G1046-5-SUC8	Surf Guard columns C8 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C8	Surf C8 100A 5µm 200x4,6mm		
15046-5-SU-C8	Surf C8 100A 5µm 150x4,6mm		
12546-5-SU-C8	Surf C8 100A 5µm 125x4,6mm		
10046-5-SU-C8	Surf C8 100A 5µm 100x4,6mm		
7546-5-SU-C8	Surf C8 100A 5µm 75x4,6mm		
5046-5-SU-C8	Surf C8 100A 5µm 50x4,6mm		
3346-5-SU-C8	Surf C8 100A 5µm 33x4,6mm		
<b>Ø4.0mm</b>			
25040-5-SU-C8	Surf C8 100A 5µm 250x4,0mm	G1040-5-SUC8	Surf Guard columns C8 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C8	Surf C8 100A 5µm 150x4,0mm		
12540-5-SU-C8	Surf C8 100A 5µm 125x4,0mm		
5040-5-SU-C8	Surf C8 100A 5µm 50x4,0mm		
<b>Ø3.0mm</b>			
15030-5-SU-C8	Surf C8 100A 5µm 150x3,0mm	G1030-5-SUC8	Surf Guard columns C8 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C8	Surf C8 100A 5µm 125x3,0mm		
10030-5-SU-C8	Surf C8 100A 5µm 100x3,0mm		
<b>Ø2.1mm</b>			
10021-5-SU-C8	Surf C8 100A 5µm 100x2,1mm	G1021-5-SUC8	Surf Guard columns C8 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C8	Surf C8 100A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C8 100A 3µm

Ø4.6mm			
15046-3-SU-C8	Surf C8 100A 3µm 150x4,6mm	G1046-3-SUC8	Surf Guard columns C8 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C8	Surf C8 100A 3µm 125x4,6mm		
10046-3-SU-C8	Surf C8 100A 3µm 100x4,6mm		
7546-3-SU-C8	Surf C8 100A 3µm 75x4,6mm		
5046-3-SU-C8	Surf C8 100A 3µm 50x4,6mm		
3346-3-SU-C8	Surf C8 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C8	Surf C8 100A 3µm 150x4,0mm	G1040-3-SUC8	Surf Guard columns C8 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C8	Surf C8 100A 3µm 125x4,0mm		
5040-3-SU-C8	Surf C8 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C8	Surf C8 100A 3µm 150x3,0mm	G1030-3-SUC8	Surf Guard columns C8 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C8	Surf C8 100A 3µm 125x3,0mm		
10030-3-SU-C8	Surf C8 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C8	Surf C8 100A 3µm 100x2,1mm	G1021-3-SUC8	Surf Guard columns C8 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C8	Surf C8 100A 3µm 50x2,1mm		

### Surf C8 Polar 100A 5µm

Ø4.6mm			
25046-5-SU-C8P	Surf C8 Polar 100A 5µm 250x4,6mm	G1046-5-SUC8P	Surf Guard columns C8 Polar 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C8P	Surf C8 Polar 100A 5µm 200x4,6mm		
15046-5-SU-C8P	Surf C8 Polar 100A 5µm 150x4,6mm		
12546-5-SU-C8P	Surf C8 Polar 100A 5µm 125x4,6mm		
10046-5-SU-C8P	Surf C8 Polar 100A 5µm 100x4,6mm		
7546-5-SU-C8P	Surf C8 Polar 100A 5µm 75x4,6mm		
5046-5-SU-C8P	Surf C8 Polar 100A 5µm 50x4,6mm		
3346-5-SU-C8P	Surf C8 Polar 100A 5µm 33x4,6mm		

(1)

# Surf HPLC Columns

## To Order

### Surf C8 Polar 100A 5µm

Ø4.0mm			
25040-5-SU-C8P	Surf C8 Polar 100A 5µm 250x4,0mm	G1040-5-SUC8P	Surf Guard columns C8 Polar 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C8P	Surf C8 Polar 100A 5µm 150x4,0mm		
12540-5-SU-C8P	Surf C8 Polar 100A 5µm 125x4,0mm		
5040-5-SU-C8P	Surf C8 Polar 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C8P	Surf C8 Polar 100A 5µm 150x3,0mm	G1030-5-SUC8P	Surf Guard columns C8 Polar 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C8P	Surf C8 Polar 100A 5µm 125x3,0mm		
10030-5-SU-C8P	Surf C8 Polar 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C8P	Surf C8 Polar 100A 5µm 100x2,1mm	G1021-5-SUC8P	Surf Guard columns C8 Polar 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C8P	Surf C8 Polar 100A 5µm 50x2,1mm		

### Surf C8 Polar 100A 3µm

Ø4.6mm			
15046-3-SU-C8P	Surf C8 Polar 100A 3µm 150x4,6mm	G1046-3-SUC8P	Surf Guard columns C8 Polar 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C8P	Surf C8 Polar 100A 3µm 125x4,6mm		
10046-3-SU-C8P	Surf C8 Polar 100A 3µm 100x4,6mm		
7546-3-SU-C8P	Surf C8 Polar 100A 3µm 75x4,6mm		
5046-3-SU-C8P	Surf C8 Polar 100A 3µm 50x4,6mm		
3346-3-SU-C8P	Surf C8 Polar 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C8P	Surf C8 Polar 100A 3µm 150x4,0mm	G1040-3-SUC8P	Surf Guard columns C8 Polar 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C8P	Surf C8 Polar 100A 3µm 125x4,0mm		
5040-3-SU-C8P	Surf C8 Polar 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C8P	Surf C8 Polar 100A 3µm 150x3,0mm	G1030-3-SUC8P	Surf Guard columns C8 Polar 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C8P	Surf C8 Polar 100A 3µm 125x3,0mm		
10030-3-SU-C8P	Surf C8 Polar 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C8P	Surf C8 Polar 100A 3µm 100x2,1mm	G1021-3-SUC8P	Surf Guard columns C8 Polar 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C8P	Surf C8 Polar 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C8 Wax 100A 5µm

Ø4.6mm			
25046-5-SU-C8W	Surf C8 Wax 100A 5µm 250x4,6mm	G1046-5-SUC8W	Surf Guard columns C8 Wax 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C8W	Surf C8 Wax 100A 5µm 200x4,6mm		
15046-5-SU-C8W	Surf C8 Wax 100A 5µm 150x4,6mm		
12546-5-SU-C8W	Surf C8 Wax 100A 5µm 125x4,6mm		
10046-5-SU-C8W	Surf C8 Wax 100A 5µm 100x4,6mm		
7546-5-SU-C8W	Surf C8 Wax 100A 5µm 75x4,6mm		
5046-5-SU-C8W	Surf C8 Wax 100A 5µm 50x4,6mm		
3346-5-SU-C8W	Surf C8 Wax 100A 5µm 33x4,6mm		
Ø4.0mm			
25040-5-SU-C8W	Surf C8 Wax 100A 5µm 250x4,0mm	G1040-5-SUC8W	Surf Guard columns C8 Wax 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C8W	Surf C8 Wax 100A 5µm 150x4,0mm		
12540-5-SU-C8W	Surf C8 Wax 100A 5µm 125x4,0mm		
5040-5-SU-C8W	Surf C8 Wax 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C8W	Surf C8 Wax 100A 5µm 150x3,0mm	G1030-5-SUC8W	Surf Guard columns C8 Wax 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C8W	Surf C8 Wax 100A 5µm 125x3,0mm		
10030-5-SU-C8W	Surf C8 Wax 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C8W	Surf C8 Wax 100A 5µm 100x2,1mm	G1021-5-SUC8W	Surf Guard columns C8 Wax 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C8W	Surf C8 Wax 100A 5µm 50x2,1mm		

[1]

# Surf HPLC Columns

## To Order

### Surf C8 Wax 100A 3µm

Ø4.6mm			
15046-3-SU-C8W	Surf C8 Wax 100A 3µm 150x4,6mm	G1046-3-SUC8W	Surf Guard columns C8 Wax 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C8W	Surf C8 Wax 100A 3µm 125x4,6mm		
10046-3-SU-C8W	Surf C8 Wax 100A 3µm 100x4,6mm		
7546-3-SU-C8W	Surf C8 Wax 100A 3µm 75x4,6mm		
5046-3-SU-C8W	Surf C8 Wax 100A 3µm 50x4,6mm		
3346-3-SU-C8W	Surf C8 Wax 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C8W	Surf C8 Wax 100A 3µm 150x4,0mm	G1040-3-SUC8W	Surf Guard columns C8 Wax 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C8W	Surf C8 Wax 100A 3µm 125x4,0mm		
5040-3-SU-C8W	Surf C8 Wax 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C8W	Surf C8 Wax 100A 3µm 150x3,0mm	G1030-3-SUC8W	Surf Guard columns C8 Wax 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C8W	Surf C8 Wax 100A 3µm 125x3,0mm		
10030-3-SU-C8W	Surf C8 Wax 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C8W	Surf C8 Wax 100A 3µm 100x2,1mm	G1021-3-SUC8W	Surf Guard columns C8 Wax 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C8W	Surf C8 Wax 100A 3µm 50x2,1mm		

[1]

[1] requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## Surf TriF C8

### Surf TriF COLUMNS



Born from our last-generation bonding technology.

Controlled hydrophobia allowing shorter retention times than on a traditional bonding, to allow a faster analysis while consuming less mobile phase.

- Ideal for a mass spectrometry use, C8 trifunctional bonding.
- High robustness in extreme environments.
- Steric selectivity.

### Our range includes three distinct selectivities:

- Normal encapping for our **Surf TriF** range,
- No endcapping for our **Surf Polar** range, ideal for mixtures of complex polarity,
- High density endcapping for our **Surf Extreme** range, allowing work on a large pH range, from 1 to 10.

# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation

### Surf C8 TriF 100A 5µm

Ø4.6mm			
25046-5-SU-C8T	Surf C8 TriF 100A 5µm 250x4,6mm	G1046-5-SUC8T	Surf Guard columns C8 Trif 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C8T	Surf C8 TriF 100A 5µm 200x4,6mm		
15046-5-SU-C8T	Surf C8 TriF 100A 5µm 150x4,6mm		
12546-5-SU-C8T	Surf C8 TriF 100A 5µm 125x4,6mm		
10046-5-SU-C8T	Surf C8 TriF 100A 5µm 100x4,6mm		
7546-5-SU-C8T	Surf C8 TriF 100A 5µm 75x4,6mm		
5046-5-SU-C8T	Surf C8 TriF 100A 5µm 50x4,6mm		
3346-5-SU-C8T	Surf C8 TriF 100A 5µm 33x4,6mm		
Ø4.0mm			
25040-5-SU-C8T	Surf C8 TriF 100A 5µm 250x4,0mm	G1040-5-SUC8T	Surf Guard columns C8 Trif 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C8T	Surf C8 TriF 100A 5µm 150x4,0mm		
12540-5-SU-C8T	Surf C8 TriF 100A 5µm 125x4,0mm		
5040-5-SU-C8T	Surf C8 TriF 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C8T	Surf C8 TriF 100A 5µm 150x3,0mm	G1030-5-SUC8T	Surf Guard columns C8 Trif 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C8T	Surf C8 TriF 100A 5µm 125x3,0mm		
10030-5-SU-C8T	Surf C8 TriF 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C8T	Surf C8 TriF 100A 5µm 100x2,1mm	G1021-5-SUC8T	Surf Guard columns C8 Trif 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C8T	Surf C8 TriF 100A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C8 TriF 100A 3µm

Ø4.6mm			
15046-3-SU-C8T	Surf C8 TriF 100A 3µm 150x4,6mm	G1046-3-SUC8T	Surf Guard columns C8 Trif 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C8T	Surf C8 TriF 100A 3µm 125x4,6mm		
10046-3-SU-C8T	Surf C8 TriF 100A 3µm 100x4,6mm		
7546-3-SU-C8T	Surf C8 TriF 100A 3µm 75x4,6mm		
5046-3-SU-C8T	Surf C8 TriF 100A 3µm 50x4,6mm		
3346-3-SU-C8T	Surf C8 TriF 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C8T	Surf C8 TriF 100A 3µm 150x4,0mm	G1040-3-SUC8T	Surf Guard columns C8 Trif 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C8T	Surf C8 TriF 100A 3µm 125x4,0mm		
5040-3-SU-C8T	Surf C8 TriF 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C8T	Surf C8 TriF 100A 3µm 150x3,0mm	G1030-3-SUC8T	Surf Guard columns C8 Trif 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C8T	Surf C8 TriF 100A 3µm 125x3,0mm		
10030-3-SU-C8T	Surf C8 TriF 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C8T	Surf C8 TriF 100A 3µm 100x2,1mm	G1021-3-SUC8T	Surf Guard columns C8 Trif 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C8T	Surf C8 TriF 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C8 Polar TriF 100A 5µm

Ø4.6mm			
25046-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 250x4,6mm	G1046-5-SUC8PT	Surf Guard columns C8 Polar Trif 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 200x4,6mm		
15046-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 150x4,6mm		
12546-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 125x4,6mm		
10046-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 100x4,6mm		
7546-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 75x4,6mm		
5046-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 50x4,6mm		
3346-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 33x4,6mm		
Ø4.0mm			
25040-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 250x4,0mm	G1040-5-SUC8PT	Surf Guard columns C8 Polar Trif 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 150x4,0mm		
12540-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 125x4,0mm		
5040-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 150x3,0mm	G1030-5-SUC8PT	Surf Guard columns C8 Polar Trif 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 125x3,0mm		
10030-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 100x2,1mm	G1021-5-SUC8PT	Surf Guard columns C8 Polar Trif 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C8PT	Surf C8 Polar TriF 100A 5µm 50x2,1mm		

(1)

### Surf C8 Polar TriF 100A 3µm

Ø4.6mm			
15046-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 150x4,6mm	G1046-3-SUC8PT	Surf Guard columns C8 Polar Trif 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 125x4,6mm		
10046-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 100x4,6mm		
7546-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 75x4,6mm		
5046-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 50x4,6mm		
3346-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 150x4,0mm	G1040-3-SUC8PT	Surf Guard columns C8 Polar Trif 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 125x4,0mm		
5040-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 150x3,0mm	G1030-3-SUC8PT	Surf Guard columns C8 Polar Trif 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 125x3,0mm		
10030-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 100x2,1mm	G1021-3-SUC8PT	Surf Guard columns C8 Polar Trif 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C8PT	Surf C8 Polar TriF 100A 3µm 50x2,1mm		

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C8 Extreme 100A 5µm

Ø4.6mm			
25046-5-SU-C8EX	Surf C8 Extreme 100A 5µm 250x4,6mm	G1046-5-SUC8EX	Surf Guard columns C8 Extreme 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C8EX	Surf C8 Extreme 100A 5µm 200x4,6mm		
15046-5-SU-C8EX	Surf C8 Extreme 100A 5µm 150x4,6mm		
12546-5-SU-C8EX	Surf C8 Extreme 100A 5µm 125x4,6mm		
10046-5-SU-C8EX	Surf C8 Extreme 100A 5µm 100x4,6mm		
7546-5-SU-C8EX	Surf C8 Extreme 100A 5µm 75x4,6mm		
5046-5-SU-C8EX	Surf C8 Extreme 100A 5µm 50x4,6mm		
3346-5-SU-C8EX	Surf C8 Extreme 100A 5µm 33x4,6mm		
Ø4.0mm			
25040-5-SU-C8EX	Surf C8 Extreme 100A 5µm 250x4,0mm	G1040-5-SUC8EX	Surf Guard columns C8 Extreme 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C8EX	Surf C8 Extreme 100A 5µm 150x4,0mm		
12540-5-SU-C8EX	Surf C8 Extreme 100A 5µm 125x4,0mm		
5040-5-SU-C8EX	Surf C8 Extreme 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C8EX	Surf C8 Extreme 100A 5µm 150x3,0mm	G1030-5-SUC8EX	Surf Guard columns C8 Extreme 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C8EX	Surf C8 Extreme 100A 5µm 125x3,0mm		
10030-5-SU-C8EX	Surf C8 Extreme 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C8EX	Surf C8 Extreme 100A 5µm 100x2,1mm	G1021-5-SUC8EX	Surf Guard columns C8 Extreme 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C8EX	Surf C8 Extreme 100A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C8 Extreme 100A 3µm

Ø4.6mm			
15046-3-SU-C8EX	Surf C8 Extreme 100A 3µm 150x4,6mm	G1046-3-SUC8EX	Surf Guard columns C8 Extreme 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C8EX	Surf C8 Extreme 100A 3µm 125x4,6mm		
10046-3-SU-C8EX	Surf C8 Extreme 100A 3µm 100x4,6mm		
7546-3-SU-C8EX	Surf C8 Extreme 100A 3µm 75x4,6mm		
5046-3-SU-C8EX	Surf C8 Extreme 100A 3µm 50x4,6mm		
3346-3-SU-C8EX	Surf C8 Extreme 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C8EX	Surf C8 Extreme 100A 3µm 150x4,0mm	G1040-3-SUC8EX	Surf Guard columns C8 Extreme 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C8EX	Surf C8 Extreme 100A 3µm 125x4,0mm		
5040-3-SU-C8EX	Surf C8 Extreme 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C8EX	Surf C8 Extreme 100A 3µm 150x3,0mm	G1030-3-SUC8EX	Surf Guard columns C8 Extreme 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C8EX	Surf C8 Extreme 100A 3µm 125x3,0mm		
10030-3-SU-C8EX	Surf C8 Extreme 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C8EX	Surf C8 Extreme 100A 3µm 100x2,1mm	G1021-3-SUC8EX	Surf Guard columns C8 Extreme 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C8EX	Surf C8 Extreme 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## Surf AQ C8

### Surf AQ COLUMNS

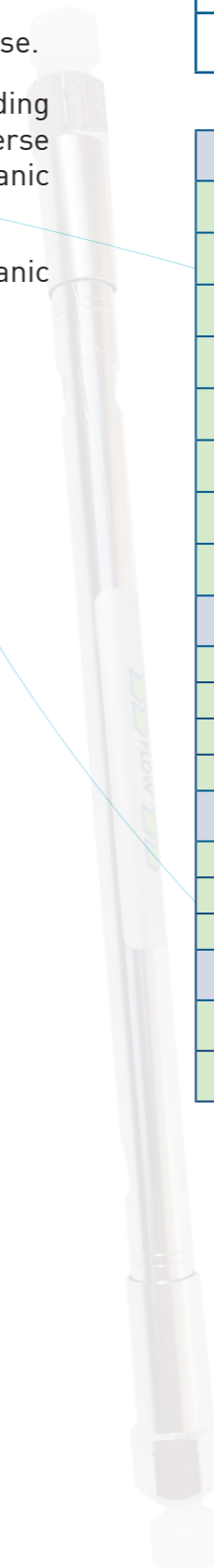
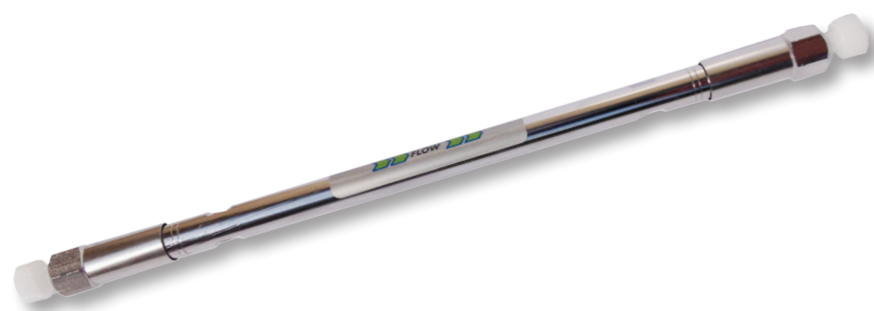


Stable from 100% of organic phase to 100% of aqueous phase.

The Surf AQ column possesses an extremely stable bonding phase which permits the use of a single column in diverse mobile phase conditions. You can easily work in highly organic or highly aqueous conditions.

High retention of hydrophobic analytes with 100% organic mobile phases.

- Available in a wide selection of column formats.
- Long column lifetime.
- Excellent retention of polar analytes with 100% aqueous mobile phases.



# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation

### Surf C8 AQ 100A 5µm

Ø4.6mm			
25046-5-SU-C8AQ	Surf C8 AQ 100A 5µm 250x4,6mm	G1046-5-SUC8AQ	Surf Guard columns C8 AQ 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C8AQ	Surf C8 AQ 100A 5µm 200x4,6mm		
15046-5-SU-C8AQ	Surf C8 AQ 100A 5µm 150x4,6mm		
12546-5-SU-C8AQ	Surf C8 AQ 100A 5µm 125x4,6mm		
10046-5-SU-C8AQ	Surf C8 AQ 100A 5µm 100x4,6mm		
7546-5-SU-C8AQ	Surf C8 AQ 100A 5µm 75x4,6mm		
5046-5-SU-C8AQ	Surf C8 AQ 100A 5µm 50x4,6mm		
3346-5-SU-C8AQ	Surf C8 AQ 100A 5µm 33x4,6mm		
Ø4.0mm			
25040-5-SU-C8AQ	Surf C8 AQ 100A 5µm 250x4,0mm	G1040-5-SUC8AQ	Surf Guard columns C8 AQ 100A 5µm 10x4,0mm 3/pk
15040-5-SU-C8AQ	Surf C8 AQ 100A 5µm 150x4,0mm		
12540-5-SU-C8AQ	Surf C8 AQ 100A 5µm 125x4,0mm		
5040-5-SU-C8AQ	Surf C8 AQ 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-C8AQ	Surf C8 AQ 100A 5µm 150x3,0mm	G1030-5-SUC8AQ	Surf Guard columns C8 AQ 100A 5µm 10x3,0mm 3/pk
12530-5-SU-C8AQ	Surf C8 AQ 100A 5µm 125x3,0mm		
10030-5-SU-C8AQ	Surf C8 AQ 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-C8AQ	Surf C8 AQ 100A 5µm 100x2,1mm	G1021-5-SUC8AQ	Surf Guard columns C8 AQ 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C8AQ	Surf C8 AQ 100A 5µm 50x2,1mm		

[1]

[1] requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

### Surf C8 AQ 100A 3µm

Ø4.6mm			
15046-3-SU-C8AQ	Surf C8 AQ 100A 3µm 150x4,6mm	G1046-3-SUC8AQ	Surf Guard columns C8 AQ 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C8AQ	Surf C8 AQ 100A 3µm 125x4,6mm		
10046-3-SU-C8AQ	Surf C8 AQ 100A 3µm 100x4,6mm		
7546-3-SU-C8AQ	Surf C8 AQ 100A 3µm 75x4,6mm		
5046-3-SU-C8AQ	Surf C8 AQ 100A 3µm 50x4,6mm		
3346-3-SU-C8AQ	Surf C8 AQ 100A 3µm 33x4,6mm		
Ø4.0mm			
25040-3-SU-C8AQ	Surf C8 AQ 100A 3µm 250x4,0mm	G1040-3-SUC8AQ	Surf Guard columns C8 AQ 100A 3µm 10x4,0mm 3/pk
15040-3-SU-C8AQ	Surf C8 AQ 100A 3µm 150x4,0mm		
12540-3-SU-C8AQ	Surf C8 AQ 100A 3µm 125x4,0mm		
5040-3-SU-C8AQ	Surf C8 AQ 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C8AQ	Surf C8 AQ 100A 3µm 150x3,0mm	G1030-3-SUC8AQ	Surf Guard columns C8 AQ 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C8AQ	Surf C8 AQ 100A 3µm 125x3,0mm		
10030-3-SU-C8AQ	Surf C8 AQ 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C8AQ	Surf C8 AQ 100A 3µm 100x2,1mm	G1021-3-SUC8AQ	Surf Guard columns C8 AQ 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C8AQ	Surf C8 AQ 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## Notes



# Surf HPLC Columns

## Surf C4

### C4 Surf Columns



Our C4 Surf Columns provide you with a similar selectivity to that of C18 and C8 columns, but with lesser retention. This difference of retention is observable for hydrophobic molecules yet it does not affect polar molecules.

Because of their shorter chain and less hydrophobic characteristics, C4 columns are best for retaining and separating the numerous biological molecules, such as hydrophobic proteins, biopolymers, and polypeptides.

Our columns are available in various pore sizes, 100, 150, 200 and 300A to allow optimum separation of most molecular mass of compounds. C4 Surf columns are available in 3 $\mu$ m and 5 $\mu$ m, and different column sizes. Various formats of preparative columns are also available upon request.



# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation
<b>Surf C4 100A 5<math>\mu</math>m</b>			
<b>Ø4.6mm</b>			
25046-5-SU-C4	Surf C4 100A 5 $\mu$ m 250x4,6mm	G1046-5-SUC4	Surf Guard columns C4 100A 5 $\mu$ m 10x4,6mm 3/pk
20046-5-SU-C4	Surf C4 100A 5 $\mu$ m 200x4,6mm		
15046-5-SU-C4	Surf C4 100A 5 $\mu$ m 150x4,6mm		
12546-5-SU-C4	Surf C4 100A 5 $\mu$ m 125x4,6mm		
10046-5-SU-C4	Surf C4 100A 5 $\mu$ m 100x4,6mm		
7546-5-SU-C4	Surf C4 100A 5 $\mu$ m 75x4,6mm		
5046-5-SU-C4	Surf C4 100A 5 $\mu$ m 50x4,6mm		
3346-5-SU-C4	Surf C4 100A 5 $\mu$ m 33x4,6mm		
<b>Ø4.0mm</b>			
25040-5-SU-C4	Surf C4 100A 5 $\mu$ m 250x4,0mm	G1040-5-SUC4	Surf Guard columns C4 100A 5 $\mu$ m 10x4,0mm 3/pk
15040-5-SU-C4	Surf C4 100A 5 $\mu$ m 150x4,0mm		
12540-5-SU-C4	Surf C4 100A 5 $\mu$ m 125x4,0mm		
5040-5-SU-C4	Surf C4 100A 5 $\mu$ m 50x4,0mm		
<b>Ø3.0mm</b>			
15030-5-SU-C4	Surf C4 100A 5 $\mu$ m 150x3,0mm	G1030-5-SUC4	Surf Guard columns C4 100A 5 $\mu$ m 10x3,0mm 3/pk
12530-5-SU-C4	Surf C4 100A 5 $\mu$ m 125x3,0mm		
10030-5-SU-C4	Surf C4 100A 5 $\mu$ m 100x3,0mm		
<b>Ø2.1mm</b>			
10021-5-SU-C4	Surf C4 100A 5 $\mu$ m 100x2,1mm	G1021-5-SUC4	Surf Guard columns C4 100A 5 $\mu$ m 10x2,1mm 3/pk
5021-5-SU-C4	Surf C4 100A 5 $\mu$ m 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

# Surf HPLC Columns

## To Order

## Notes

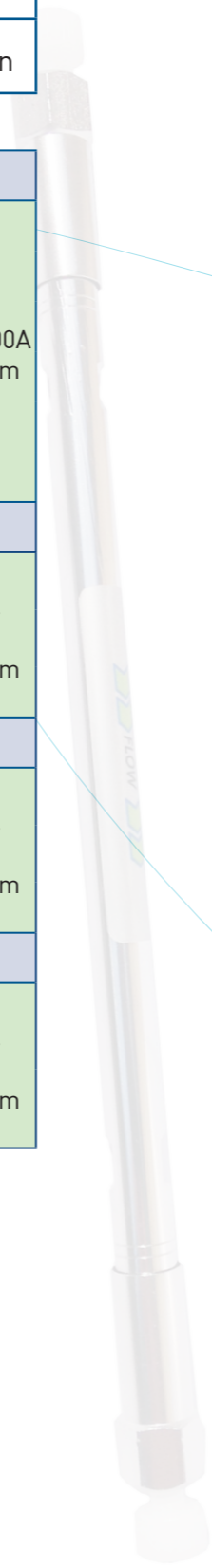
COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation

### Surf C4 100A 3µm

Ø4.6mm			
15046-3-SU-C4	Surf C4 100A 3µm 150x4,6mm	G1046-3-SUC4	Surf Guard columns C4 100A 3µm 10x4,6mm 3/pk
12546-3-SU-C4	Surf C4 100A 3µm 125x4,6mm		
10046-3-SU-C4	Surf C4 100A 3µm 100x4,6mm		
7546-3-SU-C4	Surf C4 100A 3µm 75x4,6mm		
5046-3-SU-C4	Surf C4 100A 3µm 50x4,6mm		
3346-3-SU-C4	Surf C4 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-C4	Surf C4 100A 3µm 150x4,0mm	G1040-3-SUC4	Surf Guard columns C4 100A 3µm 10x4,0mm 3/pk
12540-3-SU-C4	Surf C4 100A 3µm 125x4,0mm		
5040-3-SU-C4	Surf C4 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-C4	Surf C4 100A 3µm 150x3,0mm	G1030-3-SUC4	Surf Guard columns C4 100A 3µm 10x3,0mm 3/pk
12530-3-SU-C4	Surf C4 100A 3µm 125x3,0mm		
10030-3-SU-C4	Surf C4 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-C4	Surf C4 100A 3µm 100x2,1mm	G1021-3-SUC4	Surf Guard columns C4 100A 3µm 10x2,1mm 3/pk
5021-3-SU-C4	Surf C4 100A 3µm 50x2,1mm		

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

(1)



# Surf HPLC Columns

## Surf Phenyl and Phenyl Hexyl

### Phenyl and Phenyl Hexyl Surf Columns



We offer two ranges of Phenyl columns: Surf Phenyl and Surf Phenyl Hexyl.

Our Phenyl and Phenyl Hexyl columns represent an alternative to the retention and selectivity of C18 columns.

Well balanced hydrophobic interactions and unique n-n interactions make these columns ideal for analytes of aromatic cycles or compounds with long conjugated systems.

Phenyl and Phenyl Hexyl columns are available in 3µm and 5µm, and different column sizes. Various formats of preparative columns are also available upon request.



# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation

### Surf Phenyl 100A 5µm

Ø4.6mm			
25046-5-SU-PH	Surf Phenyl 100A 5µm 250x4,6mm	G1046-5-SUPH	Surf Guard columns Phenyl 100A 5µm 10x4,6mm 3/pk
20046-5-SU-PH	Surf Phenyl 100A 5µm 200x4,6mm		
15046-5-SU-PH	Surf Phenyl 100A 5µm 150x4,6mm		
12546-5-SU-PH	Surf Phenyl 100A 5µm 125x4,6mm		
10046-5-SU-PH	Surf Phenyl 100A 5µm 100x4,6mm		
7546-5-SU-PH	Surf Phenyl 100A 5µm 75x4,6mm		
5046-5-SU-PH	Surf Phenyl 100A 5µm 50x4,6mm		
3346-5-SU-PH	Surf Phenyl 100A 5µm 33x4,6mm		
Ø4.0mm			
25040-5-SU-PH	Surf Phenyl 100A 5µm 250x4,0mm	G1040-5-SUPH	Surf Guard columns Phenyl 100A 5µm 10x4,0mm 3/pk
15040-5-SU-PH	Surf Phenyl 100A 5µm 150x4,0mm		
12540-5-SU-PH	Surf Phenyl 100A 5µm 125x4,0mm		
5040-5-SU-PH	Surf Phenyl 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-PH	Surf Phenyl 100A 5µm 150x3,0mm	G1030-5-SUPH	Surf Guard columns Phenyl 100A 5µm 10x3,0mm 3/pk
12530-5-SU-PH	Surf Phenyl 100A 5µm 125x3,0mm		
10030-5-SU-PH	Surf Phenyl 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-PH	Surf Phenyl 100A 5µm 100x2,1mm	G1021-5-SUPH	Surf Guard columns Phenyl 100A 5µm 10x2,1mm 3/pk
5021-5-SU-PH	Surf Phenyl 100A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## Surf Phenyl

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation

### Surf Phenyl 100A 3µm

Ø4.6mm			
15046-3-SU-PH	Surf Phenyl 100A 3µm 150x4,6mm	G1046-3-SUPH	Surf Guard columns Phenyl 100A 3µm 10x4,6mm 3/pk
12546-3-SU-PH	Surf Phenyl 100A 3µm 125x4,6mm		
10046-3-SU-PH	Surf Phenyl 100A 3µm 100x4,6mm		
7546-3-SU-PH	Surf Phenyl 100A 3µm 75x4,6mm		
5046-3-SU-PH	Surf Phenyl 100A 3µm 50x4,6mm		
3346-3-SU-PH	Surf Phenyl 100A 3µm 33x4,6mm		
Ø4.0mm			
15040-3-SU-PH	Surf Phenyl 100A 3µm 150x4,0mm	G1040-3-SUPH	Surf Guard columns Phenyl 100A 3µm 10x4,0mm 3/pk
12540-3-SU-PH	Surf Phenyl 100A 3µm 125x4,0mm		
5040-3-SU-PH	Surf Phenyl 100A 3µm 50x4,0mm		
Ø3.0mm			
15030-3-SU-PH	Surf Phenyl 100A 3µm 150x3,0mm	G1030-3-SUPH	Surf Guard columns Phenyl 100A 3µm 10x3,0mm 3/pk
12530-3-SU-PH	Surf Phenyl 100A 3µm 125x3,0mm		
10030-3-SU-PH	Surf Phenyl 100A 3µm 100x3,0mm		
Ø2.1mm			
10021-3-SU-PH	Surf Phenyl 100A 3µm 100x2,1mm	G1021-3-SUPH	Surf Guard columns Phenyl 100A 3µm 10x2,1mm 3/pk
5021-3-SU-PH	Surf Phenyl 100A 3µm 50x2,1mm		

(1)

# Surf HPLC Columns

## Surf Phenyl Hexyl

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation

### Surf Phenyl Hexyl 100A 5µm

Ø4.6mm			
25046-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 250x4,6mm	G1046-5-SUPHEX	Surf Guard columns Phenyl Hexyl 100A 5µm 10x4,6mm 3/pk
20046-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 200x4,6mm		
15046-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 150x4,6mm		
12546-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 125x4,6mm		
10046-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 100x4,6mm		
7546-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 75x4,6mm		
5046-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 50x4,6mm		
3346-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 33x4,6mm		
Ø4.0mm			
25040-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 250x4,0mm	G1040-5-SUPHEX	Surf Guard columns Phenyl Hexyl 100A 5µm 10x4,0mm 3/pk
15040-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 150x4,0mm		
12540-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 125x4,0mm		
5040-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 50x4,0mm		
Ø3.0mm			
15030-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 150x3,0mm	G1030-5-SUPHEX	Surf Guard columns Phenyl Hexyl 100A 5µm 10x3,0mm 3/pk
12530-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 125x3,0mm		
10030-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 100x3,0mm		
Ø2.1mm			
10021-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 100x2,1mm	G1021-5-SUPHEX	Surf Guard columns Phenyl Hexyl 100A 5µm 10x2,1mm 3/pk
5021-5-SU-PHEX	Surf Phenyl Hexyl 100A 5µm 50x2,1mm		

(1)

(1) requires HG SURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## Surf Phenyl Hexyl

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation
<b>Surf Phenyl Hexyl 100A 3µm</b>			
<b>Ø4.6mm</b>			
15046-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 150x4,6mm	G1046-3-SUPHEX	Surf Guard columns Phenyl Hexyl 100A 3µm 10x4,6mm 3/pk
12546-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 125x4,6mm		
10046-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 100x4,6mm		
7546-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 75x4,6mm		
5046-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 50x4,6mm		
3346-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 33x4,6mm		
<b>Ø4.0mm</b>			
15040-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 150x4,0mm	G1040-3-SUPHEX	Surf Guard columns Phenyl Hexyl 100A 3µm 10x4,0mm 3/pk
12540-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 125x4,0mm		
5040-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 50x4,0mm		
<b>Ø3.0mm</b>			
15030-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 150x3,0mm	G1030-3-SUPHEX	Surf Guard columns Phenyl Hexyl 100A 3µm 10x3,0mm 3/pk
12530-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 125x3,0mm		
10030-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 100x3,0mm		
<b>Ø2.1mm</b>			
10021-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 100x2,1mm	G1021-3-SUPHEX	Surf Guard columns Phenyl Hexyl 100A 3µm 10x2,1mm 3/pk
5021-3-SU-PHEX	Surf Phenyl Hexyl 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## Notes



# Surf HPLC Columns

## Surf C30

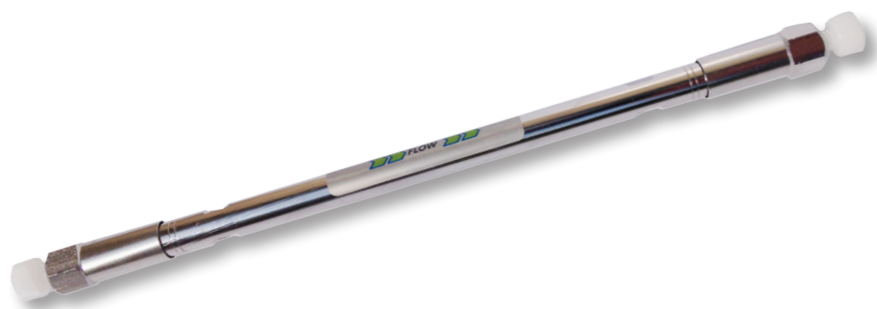
### C30 Surf Columns



Our inverted phase and silica-based C30 column offers a high selectivity for hydrophobic isomers with long carbon chains, such as carotenoids, steroids, fatty acids, and vitamin K.

The selectivity of our C30 Surf Column will provide separation on geometrical and positional isomers, which is difficult to obtain with a C18 column.

Our C30 Surf Columns are available in 3µm and 5µm, and different column sizes. Various formats of preparative columns are also available upon request.



# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation

### Surf C30 100A 5µm

Ø4.6mm			
25046-5-SU-C30	Surf C30 100A 5µm 250x4,6mm	G1046-5-SUC30	Surf Guard columns C30 100A 5µm 10x4,6mm 3/pk
20046-5-SU-C30	Surf C30 100A 5µm 200x4,6mm		
15046-5-SU-C30	Surf C30 100A 5µm 150x4,6mm		
12546-5-SU-C30	Surf C30 100A 5µm 125x4,6mm		
10046-5-SU-C30	Surf C30 100A 5µm 100x4,6mm		
7546-5-SU-C30	Surf C30 100A 5µm 75x4,6mm		
5046-5-SU-C30	Surf C30 100A 5µm 50x4,6mm		
3346-5-SU-C30	Surf C30 100A 5µm 33x4,6mm		

### Ø2,1mm

10021-5-SU-C30	Surf C30 100A 5µm 100x2,1mm	G1021-5-SUC30	Surf Guard columns C30 100A 5µm 10x2,1mm 3/pk
5021-5-SU-C30	Surf C30 100A 5µm 50x2,1mm		

(1)

### Surf C30 100A 3µm

Ø4.6mm			
25046-3-SU-C30	Surf C30 100A 3µm 250x4,6mm	G1046-3-SUC30	Surf Guard columns C30 100A 3µm 10x4,6mm 3/pk
15046-3-SU-C30	Surf C30 100A 3µm 150x4,6mm		
12546-3-SU-C30	Surf C30 100A 3µm 125x4,6mm		
10046-3-SU-C30	Surf C30 100A 3µm 100x4,6mm		
7546-3-SU-C30	Surf C30 100A 3µm 75x4,6mm		
5046-3-SU-C30	Surf C30 100A 3µm 50x4,6mm		
3346-3-SU-C30	Surf C30 100A 3µm 33x4,6mm		

### Ø2,1mm

25021-3-SU-C30	Surf C30 100A 3µm 100x2,1mm	G1021-5-SUC30	Surf Guard columns C30 100A 5µm 10x2,1mm 3/pk
20021-3-SU-C30	Surf C30 100A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## Surf Bio

### Bio C18, C8, C4 Surf Columns



Involved in chromatography since the early 2000s, we have succeeded in improving our range to include small molecules chromatography.

Building on our experience, we have extended our expertise to bio-separations (peptides and proteins).

Our new Surf Bio range is available in C4, C8 and C18, in 150A, 200A and 300A porosity, and in various dimensions.

These columns enable the separation of molecules with molecular weights above 10kD.

The narrow distribution size of our stationary phase guarantees a good mass transfer.

This performance guarantees an excellent peak shape without steric exclusion.

All bonding is done on natural and spherical silica with uniform porosity and high mechanical stability. This allows us to guarantee a high charge capacity as well as an excellent lifetime.

Our polymeric bonding technology ensures chemical stability in aggressive pH environments.

“All of our columns are individually tested on the separation of BSA digest.”

# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation

### Surf Bio C18 150A 5µm

Ø4.6mm			
25046-5-SU-BIO150C18	Surf Bio C18 150A 5µm 250x4,6mm	G1046-5-SUBIO150C18	Surf Guard columns Bio C18 150A 5µm 10x4,6mm 3/pk
15046-5-SU-BIO150C18	Surf Bio C18 150A 5µm 150x4,6mm		
5046-5-SU-BIO150C18	Surf Bio C18 150A 5µm 50x4,6mm		
Ø2,1mm			
10021-5-SU-BIO150C18	Surf Bio C18 150A 5µm 100x2,1mm	G1021-5-SUBIO150C18	Surf Guard columns Bio C18 150A 5µm 10x2,1mm 3/pk
5021-5-SU-BIO150C18	Surf Bio C18 150A 5µm 50x2,1mm		

### Surf Bio C18 150A 3µm

Ø4.6mm			
15046-3-SU-BIO150C18	Surf Bio C18 150A 3µm 150x4,6mm	G1046-3-SUBIO150C18	Surf Guard columns Bio C18 150A 3µm 10x4,6mm 3/pk
5046-3-SU-BIO150C18	Surf Bio C18 150A 3µm 50x4,6mm		
Ø2,1mm			
10021-3-SU-BIO150C18	Surf Bio C18 150A 3µm 100x2,1mm	G1021-3-SUBIO150C18	Surf Guard columns Bio C18 150A 3µm 10x2,1mm 3/pk
5021-3-SU-BIO150C18	Surf Bio C18 150A 3µm 50x2,1mm		

### Surf Bio C18 200A 5µm

Ø4.6mm			
25046-5-SU-BIO200C18	Surf Bio C18 200A 5µm 250x4,6mm	G1046-5-SUBIO200C18	Surf Guard columns Bio C18 200A 5µm 10x4,6mm 3/pk
15046-5-SU-BIO200C18	Surf Bio C18 200A 5µm 150x4,6mm		
5046-5-SU-BIO200C18	Surf Bio C18 200A 5µm 50x4,6mm		
Ø2,1mm			
10021-5-SU-BIO200C18	Surf Bio C18 200A 5µm 100x2,1mm	G1021-5-SUBIO200C18	Surf Guard columns Bio C18 200A 5µm 10x2,1mm 3/pk
5021-5-SU-BIO200C18	Surf Bio C18 200A 5µm 50x2,1mm		

C18

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

(1)

# Surf HPLC Columns

## To Order

### Surf Bio C18 200A 3µm

Ø4.6mm			
15046-3-SU-BIO200C18	Surf Bio C18 200A 3µm 150x4,6mm	G1046-3-SUBIO200C18	Surf Guard columns Bio C18 200A 3µm 10x4,6mm 3/pk
5046-3-SU-BIO200C18	Surf Bio C18 200A 3µm 50x4,6mm		
Ø2,1mm			
10021-3-SU-BIO200C18	Surf Bio C18 200A 3µm 100x2,1mm	G1021-3-SUBIO200C18	Surf Guard columns Bio C18 200A 3µm 10x2,1mm 3/pk
5021-3-SU-BIO200C18	Surf Bio C18 200A 3µm 50x2,1mm		

### Surf Bio C18 300A 5µm

Ø4.6mm			
15046-5-SU-BIO300C18	Surf Bio C18 300A 5µm 150x4,6mm	G1046-5-SUBIO300C18	Surf Guard columns Bio C18 300A 5µm 10x4,6mm 3/pk
5046-5-SU-BIO300C18	Surf Bio C18 300A 5µm 50x4,6mm		
Ø2,1mm			
10021-5-SU-BIO300C18	Surf Bio C18 300A 5µm 100x2,1mm	G1021-5-SUBIO300C18	Surf Guard columns Bio C18 300A 5µm 10x2,1mm 3/pk
5021-5-SU-BIO300C18	Surf Bio C18 300A 5µm 50x2,1mm		

### Surf Bio C18 300A 3µm

Ø4.6mm			
15046-3-SU-BIO300C18	Surf Bio C18 300A 3µm 150x4,6mm	G1046-3-SUBIO300C18	Surf Guard columns Bio C18 300A 3µm 10x4,6mm 3/pk
5046-3-SU-BIO300C18	Surf Bio C18 300A 3µm 50x4,6mm		
Ø2,1mm			
10021-3-SU-BIO300C18	Surf Bio C18 300A 3µm 100x2,1mm	G1021-3-SUBIO300C18	Surf Guard columns Bio C18 300A 3µm 10x2,1mm 3/pk
5021-3-SU-BIO300C18	Surf Bio C18 300A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

## To Order

COLUMNS		GUARD COLUMNS	
Reference	Designation	Reference	Designation

### Surf Bio C8 150A 5µm

Ø4.6mm			
25046-5-SU-BIO150C8	Surf Bio C8 150A 5µm 250x4,6mm	G1046-5-SUBIO150C8	Surf Guard columns Bio C8 150A 5µm 10x4,6mm 3/pk
15046-5-SU-BIO150C8	Surf Bio C8 150A 5µm 150x4,6mm		
5046-5-SU-BIO150C8	Surf Bio C8 150A 5µm 50x4,6mm		
Ø2,1mm			
10021-5-SU-BIO150C8	Surf Bio C8 150A 5µm 100x2,1mm	G1021-5-SUBIO150C8	Surf Guard columns Bio C8 150A 5µm 10x2,1mm 3/pk
5021-5-SU-BIO150C8	Surf Bio C8 150A 5µm 50x2,1mm		

### Surf Bio C8 150A 3µm

Ø4.6mm			
15046-3-SU-BIO150C8	Surf Bio C8 150A 3µm 150x4,6mm	G1046-3-SUBIO150C8	Surf Guard columns Bio C8 150A 3µm 10x4,6mm 3/pk
5046-3-SU-BIO150C8	Surf Bio C8 150A 3µm 50x4,6mm		
Ø2,1mm			
10021-3-SU-BIO150C8	Surf Bio C8 150A 3µm 100x2,1mm	G1021-3-SUBIO150C8	Surf Guard columns Bio C8 150A 3µm 10x2,1mm 3/pk
5021-3-SU-BIO150C8	Surf Bio C8 150A 3µm 50x2,1mm		

### Surf Bio C8 200A 5µm

Ø4.6mm			
25046-5-SU-BIO200C8	Surf Bio C8 200A 5µm 250x4,6mm	G1046-5-SUBIO200C8	Surf Guard columns Bio C8 200A 5µm 10x4,6mm 3/pk
15046-5-SU-BIO200C8	Surf Bio C8 200A 5µm 150x4,6mm		
5046-5-SU-BIO200C8	Surf Bio C8 200A 5µm 50x4,6mm		
Ø2,1mm			
10021-5-SU-BIO200C8	Surf Bio C8 200A 5µm 100x2,1mm	G1021-5-SUBIO200C8	Surf Guard columns Bio C8 200A 5µm 10x2,1mm 3/pk
5021-5-SU-BIO200C8	Surf Bio C8 200A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.



# Surf HPLC Columns

To Order

## Surf Bio C8 200A 3µm

Ø4.6mm			
15046-3-SU-BIO200C8	Surf Bio C8 200A 3µm 150x4,6mm	G1046-3-SUBIO200C8	Surf Guard columns Bio C8 200A 3µm 10x4,6mm 3/pk
5046-3-SU-BIO200C8	Surf Bio C8 200A 3µm 50x4,6mm		
Ø2,1mm			
10021-3-SU-BIO200C8	Surf Bio C8 200A 3µm 100x2,1mm	G1021-3-SUBIO200C8	Surf Guard columns Bio C8 200A 3µm 10x2,1mm 3/pk
5021-3-SU-BIO200C8	Surf Bio C8 200A 3µm 50x2,1mm		

## Surf Bio C8 300A 5µm

Ø4.6mm			
25046-5-SU-BIO300C8	Surf Bio C8 300A 5µm 250x4,6mm	G1046-5-SUBIO300C8	Surf Guard columns Bio C8 300A 5µm 10x4,6mm 3/pk
15046-5-SU-BIO300C8	Surf Bio C8 300A 5µm 150x4,6mm		
5046-5-SU-BIO300C8	Surf Bio C8 300A 5µm 50x4,6mm		
Ø2,1mm			
10021-5-SU-BIO300C8	Surf Bio C8 300A 5µm 100x2,1mm	G1021-5-SUBIO300C8	Surf Guard columns Bio C8 300A 5µm 10x2,1mm 3/pk
5021-5-SU-BIO300C8	Surf Bio C8 300A 5µm 50x2,1mm		

## Surf Bio C8 300A 3µm

Ø4.6mm			
15046-3-SU-BIO300C8	Surf Bio C8 300A 3µm 150x4,6mm	G1046-3-SUBIO300C8	Surf Guard columns Bio C8 300A 3µm 10x4,6mm 3/pk
5046-3-SU-BIO300C8	Surf Bio C8 300A 3µm 50x4,6mm		
Ø2,1mm			
10021-3-SU-BIO300C8	Surf Bio C8 300A 3µm 100x2,1mm	G1021-3-SUBIO300C8	Surf Guard columns Bio C8 300A 3µm 10x2,1mm 3/pk
5021-3-SU-BIO300C8	Surf Bio C8 300A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

C8

# Surf HPLC Columns

To Order

## COLUMNS

## GUARD COLUMNS

Reference	Designation	Reference	Designation
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## Surf Bio C4 150A 5µm

Ø4.6mm			
25046-5-SU-BIO150C4	Surf Bio C4 150A 5µm 250x4,6mm	G1046-5-SUBIO150C4	Surf Guard columns Bio C4 150A 5µm 10x4,6mm 3/pk
15046-5-SU-BIO150C4	Surf Bio C4 150A 5µm 150x4,6mm		
5046-5-SU-BIO150C4	Surf Bio C4 150A 5µm 50x4,6mm		
Ø2,1mm			
10021-5-SU-BIO150C4	Surf Bio C4 150A 5µm 100x2,1mm	G1021-5-SUBIO150C4	Surf Guard columns Bio C4 150A 5µm 10x2,1mm 3/pk
5021-5-SU-BIO150C4	Surf Bio C4 150A 5µm 50x2,1mm		

## Surf Bio C4 150A 3µm

Ø4.6mm			
15046-3-SU-BIO150C4	Surf Bio C4 150A 3µm 150x4,6mm	G1046-3-SUBIO150C4	Surf Guard columns Bio C4 150A 3µm 10x4,6mm 3/pk
5046-3-SU-BIO150C4	Surf Bio C4 150A 3µm 50x4,6mm		
Ø2,1mm			
10021-3-SU-BIO150C4	Surf Bio C4 150A 3µm 100x2,1mm	G1021-3-SUBIO150C4	Surf Guard columns Bio C4 150A 3µm 10x2,1mm 3/pk
5021-3-SU-BIO150C4	Surf Bio C4 150A 3µm 50x2,1mm		

## Surf Bio C4 200A 5µm

Ø4.6mm			
25046-5-SU-BIO200C4	Surf Bio C4 200A 5µm 250x4,6mm	G1046-5-SUBIO200C4	Surf Guard columns Bio C4 200A 5µm 10x4,6mm 3/pk
15046-5-SU-BIO200C4	Surf Bio C4 200A 5µm 150x4,6mm		
5046-5-SU-BIO200C4	Surf Bio C4 200A 5µm 50x4,6mm		
Ø2,1mm			
10021-5-SU-BIO200C4	Surf Bio C4 200A 5µm 100x2,1mm	G1021-5-SUBIO200C4	Surf Guard columns Bio C4 200A 5µm 10x2,1mm 3/pk
5021-5-SU-BIO200C4	Surf Bio C4 200A 5µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

To Order

## Surf Bio C4 200A 3µm

Ø4.6mm			
25046-3-SU-BIO200C4	Surf Bio C4 200A 3µm 250x4,6mm	G1046-3-SUBIO200C4	Surf Guard columns Bio C4 200A 3µm 10x4,6mm 3/pk
15046-3-SU-BIO200C4	Surf Bio C4 200A 3µm 150x4,6mm		
5046-3-SU-BIO200C4	Surf Bio C4 200A 3µm 50x4,6mm		
Ø2,1mm			
10021-3-SU-BIO200C4	Surf Bio C4 200A 3µm 100x2,1mm	G1021-3-SUBIO200C4	Surf Guard columns Bio C4 200A 3µm 10x2,1mm 3/pk
5021-3-SU-BIO200C4	Surf Bio C4 200A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.

# Surf HPLC Columns

To Order

## Surf Bio C4 300A 5µm

Ø4.6mm			
25046-5-SU-BIO300C4	Surf Bio C4 300A 5µm 250x4,6mm	G1046-5-SUBIO300C4	Surf Guard columns Bio C4 300A 5µm 10x4,6mm 3/pk
15046-5-SU-BIO300C4	Surf Bio C4 300A 5µm 150x4,6mm		
5046-5-SU-BIO300C4	Surf Bio C4 300A 5µm 50x4,6mm		
Ø2,1mm			
10021-5-SU-BIO300C4	Surf Bio C4 300A 5µm 100x2,1mm	G1021-5-SUBIO300C4	Surf Guard columns Bio C4 300A 5µm 10x2,1mm 3/pk
5021-5-SU-BIO300C4	Surf Bio C4 300A 5µm 50x2,1mm		

C4

## Surf Bio C4 300A 3µm

Ø4.6mm			
15046-3-SU-BIO300C4	Surf Bio C4 300A 3µm 150x4,6mm	G1046-3-SUBIO300C4	Surf Guard columns Bio C4 300A 3µm 10x4,6mm 3/pk
5046-3-SU-BIO300C4	Surf Bio C4 300A 3µm 50x4,6mm		
Ø2,1mm			
10021-3-SU-BIO300C4	Surf Bio C4 300A 3µm 100x2,1mm	G1021-3-SUBIO300C4	Surf Guard columns Bio C4 300A 3µm 10x2,1mm 3/pk
5021-3-SU-BIO300C4	Surf Bio C4 300A 3µm 50x2,1mm		

(1)

(1) requires HGSURF support for pre-column Surf 10x2,1mm, 10x3,0mm, 10x4,0mm, 10x4,6mm.



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