

Finisterre

by Teknokroma™



Finisterre™ SPE Cartridges

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Technical Information of Finisterre™ SPE Cartridges

Teknokroma introduces in the market the line of Finisterre™ Solid Phase Extraction columns for a fast and efficient sample clean-up and concentration prior to analysis through GC, HPLC, and/or other instrumental methods.

SPE method concentrates and purifies analytes from solution by sorption onto a disposable solid phase cartridge, followed by elution of the analyte with an appropriate solvent for instrumental analysis.

The Finisterre™ SPE columns improve sample purity, quantification, and HPLC column life.

Our unic packing process **Filling PRIM™** guarantees unsurpassed accuracy by strictly monitoring the amount of packing in each individual column.

The dosification control by weight, column by column, using an automated specially designed machine, permits to assure results with high accuracy and less variability.

The irregular silica shape with an average particle size of 50 µm and no fines, avoid silica contamination in your final product. The pore diameter used in the Finisterre™ packing is 60Å .

The very tight particle size distribution used to manufacture SPE Finisterre™ packing provides a very good separation, as the sample and solvent flow uniformly through the sorbent bed, incrementing the contact with the packing.

Finisterre™ SPE columns consist of molded high purity polypropylene bodies with two 20 µm polyethylene frits that contain the packing material.

Finisterre™ SPE columns are equipped with male Luer-tips and designed for elution using either a syringe, a filter flask or a vacuum manifold.

Finisterre™ SPE products are manufactured in compliance with ISO 9001 and technical procedures and tested according international standards ISO 17025.

Teknokroma Finisterre™ SPE cartridges are available in four sizes (1, 3, 6 and 12 mL) and different packing materials (C18, C8, C4, C2, PH, SI, CN, NH₂, DIOL, Florisil™, SAX, SCX). Sorbent weights ranged from 100 mg to 1 g.

Samples and raw data of all Finisterre™ SPE cartridges batches are stored during 5 years from production for reference.



Product Presentation

Finisterre™ C18 SPE Columns



Is the traditional matrix for reversed-phase chromatography. The high loading provides the highest degree of hydrophobicity

Retention Mechanism: Reverse phase, one of the most hydrophobic phases

Functional Group: Polymerically bonded octadecyl C18 endcapped. High Capacity C18

Endcapped: yes

Carbon Load: 17.0 %

Silica Base: Irregular Shape

Average Particle Size: 50 µm

Pore Diameter: 60 Å

Hardware: Polypropylene

Frit: Polyethylene 20 µm porosity

Applications

Isolation of hydrophobic species from solution
Compounds retained are Non- polar to moderately polar in a polar matrix.

- Drugs in serum, plasma and urine
- Desalting of peptides
- Organic acids in wine
- Pesticides in water by trace enrichment.

Finisterre™ C18 High Capacity C18 are Equivalent to:

Baker C18, Macherey –Nagel C18–ec, Macherey –Nagel C18–ecf, Phenomenex C 18-E, Supelco DSC-18, Supelco ENVI-18, Varian C 18, Waters C18, Whatman ODS-5

Cat.No	Description	pk
TR-F034000	Finisterre SPE Columns C18/17% 100mg/1ml	100
TR-F034002	Finisterre SPE Columns C18/17% 200mg/3ml	50
TR-F034004	Finisterre SPE Columns C18/17% 500mg/3ml	50
TR-F034006	Finisterre SPE Columns C18/17% 500mg/6ml	30
TR-F034008	Finisterre SPE Columns C18/17% 1000mg/6ml	30
TR-F034010	Finisterre SPE Columns C18/17% 1000mg/12ml	20
TR-F034012	Finisterre SPE Columns C18/17% 2000mg/12ml	20

Finisterre™ C8 SPE Columns



Retention Mechanism: Reverse phase.

Functional Group: Octyl (C8)

Endcapped: yes

Carbon Load: 8.5 %

Silica Base: Irregular Shape

Average Particle Size 50 µm

Pore Diameter: 60 Å

Hardware: Polypropylene

Frit: Polyethylene 20 µm porosity

Applications

For compounds retained too strongly on C18

Cat.No	Description		pk
TR-F034020	Finisterre SPE Columns C8	100mg/1ml	100
TR-F034022	Finisterre SPE Columns C8	200mg/3ml	50
TR-F034024	Finisterre SPE Columns C8	500mg/3ml	50
TR-F034026	Finisterre SPE Columns C8	500mg/6ml	30
TR-F034028	Finisterre SPE Columns C8	1000mg/6ml	30
TR-F034030	Finisterre SPE Columns C8	1000mg/12ml	20
TR-F034032	Finisterre SPE Columns C8	2000mg/12ml	20

Finisterre™ C2 SPE Columns



Retention Mechanism: Reverse phase.

Functional Group: Ethyl (C2)

Endcapped: yes

Carbon Load: 5.5 %

Silica Base: Irregular Shape

Average Particle Size 50 µm

Pore Diameter: 60 Å

Hardware: Polypropylene

Frit: Polyethylene 20 µm porosity

Applications

Antiepileptics from plasma

Cat.No	Description		pk
TR-F034060	Finisterre SPE Columns C2	100mg/1ml	100
TR-F034062	Finisterre SPE Columns C2	200mg/3ml	50
TR-F034064	Finisterre SPE Columns C2	500mg/3ml	50
TR-F034066	Finisterre SPE Columns C2	500mg/6ml	30
TR-F034068	Finisterre SPE Columns C2	1000mg/6ml	30
TR-F034070	Finisterre SPE Columns C2	1000mg/12ml	20
TR-F034072	Finisterre SPE Columns C2	2000mg/12ml	20

Finisterre™ PH SPE Columns



Retention Mechanism: Reverse phase.

Functional Group: Phenyl (PH)

Endcapped: yes

Carbon Load: 3.8 %

Silica Base: Irregular Shape

Average Particle Size 50 µm

Pore Diameter: 60 Å

Hardware: Polypropylene

Applications

Choose for highly aromatic compounds.

Cat.No	Description		pk
TR-F034080	Finisterre SPE Columns PH	100mg/1ml	100
TR-F034082	Finisterre SPE Columns PH	200mg/3ml	50
TR-F034084	Finisterre SPE Columns PH	500mg/3ml	50
TR-F034086	Finisterre SPE Columns PH	500mg/6ml	30
TR-F034088	Finisterre SPE Columns PH	1000mg/6ml	30
TR-F034090	Finisterre SPE Columns PH	1000mg/12ml	20
TR-F034092	Finisterre SPE Columns PH	2000mg/12ml	20

Finisterre™ CN SPE Columns



Retention Mechanism: Normal phase -weak/moderate non-polar with aqueous matrix, or polar with non polar organic matrix

Functional Group: Cyanopropyl (CN)

Endcapped: yes

Carbon Load: 4.0 %

Silica Base: Irregular Shape

Average Particle Size 50 µm

Pore Diameter: 60 Å

Hardware: Polypropylene

Frit: Polypropylene 20 µm porosity

Applications

Compounds retained are polar compounds in a non-polar matrix

- Analytes in aqueous or organic solvents
- Drugs and metabolites in physiological fluids.

Cat.No	Description		pk
TR-F034100	Finisterre CN SPE Columns	100mg/1ml	100
TR-F034102	Finisterre CN SPE Columns	200mg/3ml	50
TR-F034104	Finisterre CN SPE Columns	500mg/3ml	50
TR-F034106	Finisterre CN SPE Columns	500mg/6ml	30
TR-F034108	Finisterre CN SPE Columns	1000mg/6ml	30
TR-F034110	Finisterre CN SPE Columns	1000mg/12ml	20
TR-F034112	Finisterre CN SPE Columns	2000mg/12ml	20

Finisterre™ NH₂ SPE Columns



Retention Mechanism: Weak anion exchange with aqueous matrix, normal phase with non-polar organic matrix.

Functional Group: Aminopropyl (NH₂)

Endcapped: no

Carbon Load: 5.0 %

Silica Base: Irregular Shape

Average Particle Size 50 µm

Pore Diameter: 60 Å

Hardware: Polypropylene

Frit: Polypropylene 20 µm porosity

Applications

Compounds retained are polar compounds in a non-polar matrix

Cat.No	Description		pk
TR-F034140	Finisterre SPE Columns NH ₂	100mg/1ml	100
TR-F034142	Finisterre SPE Columns NH ₂	200mg/3ml	50
TR-F034144	Finisterre SPE Columns NH ₂	500mg/3ml	50
TR-F034146	Finisterre SPE Columns NH ₂	500mg/6ml	30
TR-F034148	Finisterre SPE Columns NH ₂	1000mg/6ml	30
TR-F034150	Finisterre SPE Columns NH ₂	1000mg/12ml	20
TR-F034152	Finisterre SPE Columns NH ₂	2000mg/12ml	20

Finisterre™ DIOL SPE Columns



Retention Mechanism: Normal phase

Functional Group: DIOL (2OH)

Endcapped: no

Carbon Load: 6.0 %

Silica Base: Irregular Shape

Average Particle Size 50 µm

Pore Diameter: 60 Å

Applications

Compounds retained are polar compounds in a non-polar matrix

- Analytes in aqueous or organic solvents
- Drugs and metabolites in physiological fluids

Cat.No	Description		pk
TR-F034180	Finisterre Diol SPE Columns	100mg/1ml	100
TR-F034182	Finisterre Diol SPE Columns	200mg/3ml	50
TR-F034184	Finisterre Diol SPE Columns	500mg/3ml	50
TR-F034186	Finisterre Diol SPE Columns	500mg/6ml	30
TR-F034188	Finisterre Diol SPE Columns	1000mg/6ml	30
TR-F034190	Finisterre Diol SPE Columns	1000mg/12ml	20
TR-F034192	Finisterre Diol SPE Columns	2000mg/12ml	20

Finisterre™ Florisil SPE Columns



Retention Mechanism: Normal phase

Functional Group: Florisil® (FLO)

Base: Magnesium Silicate

Average Particle Size 75-100 µm

Pore Diameter: 85 Å

Hardware: Polypropylene

Frit: Polypropylene 20 µm porosity

Applications

Compounds retained are polar compounds in a non-polar matrix
Isolation of low to moderate polarity species from non-aqueous solution

- Pesticides in food and feeds
- Polychlorinated biphenyls in transformer oil
- Clean up of pesticides from soil extraction and food residue

Cat.No	Description	pk
TR-F034160	Finisterre Florisil SPE Column 100mg/1ml	100
TR-F034162	Finisterre Florisil SPE Column 200mg/3ml	50
TR-F034164	Finisterre Florisil SPE Column 500mg/3ml	50
TR-F034166	Finisterre Florisil SPE Column 500mg/6ml	30
TR-F034168	Finisterre Florisil SPE Column 1000mg/6ml	30
TR-F034170	Finisterre Florisil SPE Column 1000mWg/12ml	20
TR-F034172	Finisterre Florisil SPE Column 2000mWg/12ml	20

Finisterre™ Florisil/P SPE Columns



Retention Mechanism: Normal phase

Functional Group: Florisil® (FLO)

Base: Magnesium Silicate

Average Particle Size 100-200 µm

Pore Diameter: 85 Å

Hardware: Polypropylene

Frit: Polypropylene 20 µm porosity

Applications

Compounds retained are polar compounds in a non-polar matrix
Isolation of low to moderate polarity species from non-aqueous solution

- Pesticides in food and feeds
- Polychlorinated biphenyls in transformer oil
- Clean up of pesticides from soil extraction and food residue

Cat.No	Description	pk
TR-F034161	Finisterre Florisil/P SPE Column 100mg/1ml	100
TR-F034163	Finisterre Florisil/P SPE Column 200mg/3ml	50
TR-F034165	Finisterre Florisil/P SPE Column 500mg/3ml	50
TR-F034167	Finisterre Florisil/P SPE Column 500mg/6ml	30
TR-F034169	Finisterre Florisil/P SPE Column 1000mg/6ml	30
TR-F034171	Finisterre Florisil/P SPE Column 1000mWg/12ml	20
TR-F034173	Finisterre Florisil/P SPE Column 2000mWg/12ml	20

Finisterre™ Si SPE Columns



Retention Mechanism: Normal phase, polar neutral phase

Functional Group: Silica (Si)

Base: Silica

Average Particle Size 50 µm

Pore Diameter: 60 Å

Hardware: Polypropylene

Frit: Polypropylene 20 µm porosity

Applications

Isolation of low to moderate polarity species from non-aqueous solution.

Compounds retained are Polar compounds in a non-polar matrix

- Lipid classification
- Separation of plant pigments
- Removal of fat soluble vitamins
- Clean up of pesticides from soil extraction and food residue

Cat.No	Description	pk
TR-F034120	Finisterre SPE Columns Silica 100mg/1ml	100
TR-F034122	Finisterre SPE Columns Silica 200mg/3ml	50
TR-F034124	Finisterre SPE Columns Silica 500mg/3ml	50
TR-F034126	Finisterre SPE Columns Silica 500mg/6ml	30
TR-F034128	Finisterre SPE Columns Silica 1000mg/6ml	30
TR-F034130	Finisterre SPE Columns Silica 1000mg/12ml	20
TR-F034132	Finisterre SPE Columns Silica 2000mg/12ml	20

Finisterre™ SAX SPE Columns



Retention Mechanism: Anion exchange

Functional Group: Tetramethyl ammonium

Base: Silica

Counter Ion: Acetate

Average Particle Size 50 µm

Hardware: Polypropylene

Frit: Polypropylene 20 µm porosity

Applications

Retains (-) charged compounds

Cat.No	Description		pk
TR-F034200	Finisterre SAX SPE Columns	100mg/1ml	100
TR-F034202	Finisterre SAX SPE Columns	200mg/3ml	50
TR-F034204	Finisterre SAX SPE Columns	500mg/3ml	50
TR-F034206	Finisterre SAX SPE Columns	500mg/6ml	30
TR-F034208	Finisterre SAX SPE Columns	1000mg/6ml	30
TR-F034210	Finisterre SAX SPE Columns	1000mg/12ml	20
TR-F034212	Finisterre SAX SPE Columns	2000mg/12ml	20

Finisterre™ SCX SPE Columns



Retention Mechanism: Cation exchange

Functional Group: Benzene sulfonic acid

Base: Silica

Counter Ion: Hydrogen

Exchange Capacity: 0.24 meq/100 mg

Average Particle Size 50 µm

Hardware: Polypropylene

Frit: Polypropylene 20 µm porosity

Applications

Retains (+) charged compounds

Cat.No	Description		pk
TR-F034220	Finisterre SCX SPE Columns	100mg/1ml	100
TR-F034222	Finisterre SCX SPE Columns	200mg/3ml	50
TR-F034224	Finisterre SCX SPE Columns	500mg/3ml	50
TR-F034226	Finisterre SCX SPE Columns	500mg/6ml	30
TR-F034228	Finisterre SCX SPE Columns	1000mg/6ml	30
TR-F034230	Finisterre SCX SPE Columns	1000mg/12ml	20
TR-F034232	Finisterre SCX SPE Columns	2000mg/12ml	20

Note: Customs configurations about Finisterre SPE columns are available, contact with us for further information



Finisterre™ SPE columns are simple to use and allow four-steps sample preparation

1. Conditioning
2. Sample Application
3. Washing
4. Elution

The capacity of SPE columns are defined as the amount of analyte that a packing bed will retain from a sample matrix.

There are some variables that affect capacity, basically: sample matrix, analyte, structure and other compound than compete with the analyte. But in general, with 60 Å bonded silica phases will retain approximately 1 % of their bed weight.

For example, a 200 mg bed will retain approximately 2 mg of all compounds in a sample that have an affinity for the sorbent.

But the best system to determine the capacity for an SPE column is experimentally.

1. Conditioning

The conditioning wets the packing surface, making the packing functional group fully accessible to the sample. In general for 100 mg of packing you can pass 2 ml of two solvent, generally methanol followed of water in reverse phase. In normal phase are usually conditioned with the solvent that is weaker than the sample matrix.

It is important that the tube should not be dried before adding the sample.

2. Sample application

A general rule use a sample volume equal to half the tube volume, for example 1 ml for 200 mg tubes.

The flow rate of elution of sample about 1 ml/min. for 100 mg tubes, 2 ml /min. for 200 mg tubes, and 3 ml/min. for 500 mg tubes.

3. Washing

Select a wash solvent that has the same, or slightly greater, elution strength as the sample matrix.

Wash solvents should remove weakly retained interferences without being strong enough to elute the analyte.

4. Elution

Select a solvent with more elution strength than the sample matrix.

As standard use 250 µl of solvent for 100 mg of packing, in general the solvents use for elution should be strong enough to completely elute an analyte in a small volume 1 or 2 ml.

Attention should be paid to solvent strength relative to the packing material.

Finisterre OA™ HLB



Description:

Finisterre OA™ HLB is a wettable copolymer presenting a Hydrophobic-Lipophilic Balance (HLB) permitting a strong retention for neutral, acidic and basic compounds and a high stability in organic solvents.

Particle Size: 40 µm
Pore Diameter: 110 Å
Surface Area: 850 m²/g
pH Stability: 0 to 14

Applications

- Drugs & metabolites in biological fluids
- API from tablets, creams, in waste water & drinking water
- Environmental analysis: trace of PAHs, pesticides, herbicides, phenols & PCB in water
- Antibiotics and pesticides in food & beverage

Cat.No	Description	pk
TR-FB034300	Finisterre OA™ HLB SPE Columns 30mg/1ml	100
TR-FB034302	Finisterre OA™ HLB SPE Columns 60mg/3ml	50
TR-FB034304	Finisterre OA™ HLB SPE Columns 100mg/6ml	30
TR-FB034306	Finisterre OA™ HLB SPE Columns 200mg/6ml	30
TR-FB034308	Finisterre OA™ HLB SPE Columns 500mg/6ml	30

Finisterre OA™ SCX



Description:

Finisterre OA™ SCX is a polystyrene-divinylbenzene copolymer functionalized by a strong cation exchanger presenting a high selectivity for acids (pK_a 2 - 10). It is highly stable in organic solvents.

Particle Size: 85 µm
Pore Diameter: 60 Å
Surface Area: 800 m²/g
pH Stability: 0 to 14
Ionic Capacity: 0,85 meq/g

Applications

- Basic Drugs & metabolites in biological fluids
- API from tablets, creams, in waste water & drinking water
- Pesticides, herbicides, fungicides & melamine from food & beverage

Cat.No	Description	pk
TR-FB034320	Finisterre OA™ SCX SPE Columns 30mg/1ml	100
TR-FB034322	Finisterre OA™ SCX SPE Columns 60mg/3ml	50
TR-FB034324	Finisterre OA™ SCX SPE Columns 100mg/6ml	30
TR-FB034326	Finisterre OA™ SCX SPE Columns 200mg/6ml	30
TR-FB034328	Finisterre OA™ SCX SPE Columns 500mg/6ml	30

Finisterre OA™ DVB



Description:

Finisterre OA™ DVB is a polystyrene-divinylbenzene copolymer presenting a high hydrophobicity used as reversed-phase for extraction of neutral, acidic and basic compounds in viscous matrices.

Particle Size: 85 µm
Pore Diameter: 60 Å
Surface Area: 1000 m²/g
pH Stability: 0 to 14

Applications

- Drugs & metabolites in biological fluids
- API from tablets, creams, in waste water & drinking water
- Environmental analysis: trace of PAHs, pesticides, herbicides, phenols & PCB in water

Cat.No	Description	pk
TR-FB034310	Finisterre OA™ DVB SPE Columns 30mg/1ml	100
TR-FB034312	Finisterre OA™ DVB SPE Columns 60mg/3ml	50
TR-FB034314	Finisterre OA™ DVB SPE Columns 100mg/6ml	30
TR-FB034317	Finisterre OA™ DVB SPE Columns 200mg/6ml	30
TR-FB034318	Finisterre OA™ DVB SPE Columns 500mg/6ml	30

Finisterre OA™ SAX



Description:

Finisterre OA™ SAX is a polystyrene-divinylbenzene copolymer functionalized by a strong anion exchanger presenting a high selectivity (pK_a 2 - 8). It is highly stable in organic solvents.

Particle Size: 85 µm
Pore Diameter: 60 Å
Surface Area: 900 m²/g
pH Stability: 1 to 14
Ionic Capacity: 0,25 meq/g

Applications

- Acidic compounds & metabolites from biological fluids & tissues
- Food additives & contaminants
- Acidic phenols
- Acidic herbicides

Cat.No	Description	pk
TR-FB034330	Finisterre OA™ SAX SPE Columns 30mg/1ml	100
TR-FB034332	Finisterre OA™ SAX SPE Columns 60mg/3ml	50
TR-FB034334	Finisterre OA™ SAX SPE Columns 100mg/6ml	30
TR-FB034336	Finisterre OA™ SAX SPE Columns 200mg/6ml	30
TR-FB034338	Finisterre OA™ SAX SPE Columns 500mg/6ml	30

Finisterre OA™ WCX



Description:

Finisterre OA™ WCX is a polystyrene-divinylbenzene copolymer functionalized by a weak cation exchanger used to catch and release strong basic compounds ($pK_a > 10$). It is highly stable in organic solvents.

Particle Size: 85 μm
Pore Diameter: 60 Å
Surface Area: 800 m^2/g
pH Stability: 0 to 14
Ionic Capacity: 0,70 meq/g

Applications

- Strong basic compounds from biological fluids & tissues
- Streptomycin from food

Cat.No	Description	pk
TR-FB034340	Finisterre OA™ WCX SPE Columns 30mg/1ml	100
TR-FB034342	Finisterre OA™ WCX SPE Columns 60mg/3ml	50
TR-FB034344	Finisterre OA™ WCX SPE Columns 100mg/6ml	30
TR-FB034346	Finisterre OA™ WCX SPE Columns 200mg/6ml	30
TR-FB034348	Finisterre OA™ WCX SPE Columns 500mg/6ml	30

Finisterre OA™ HI B



Description:

Finisterre OA™ WAX is a polystyrene-divinylbenzene copolymer functionalized by a weak anion exchanger used to catch and release strong acidic compounds ($pK_a < 2$). It is highly stable in organic solvents.

Particle Size: 85 μm
Pore Diameter: 60 Å
Surface Area: 800 m^2/g
pH Stability: 1 to 14
Ionic Capacity: 0,50 meq/g

Applications

- Drugs & metabolites in biological fluids
- API from tablets, creams, in waste water & drinking water
- Environmental analysis: trace of PAHs, pesticides, herbicides, phenols & PCB in water
- Antibiotics and pesticides in food & beverage

Cat.No	Description	pk
TR-FB034350	Finisterre OA™ WAX SPE Columns 30mg/1ml	100
TR-FB034352	Finisterre OA™ WAX SPE Columns 60mg/3ml	50
TR-FB034354	Finisterre OA™ WAX SPE Columns 100mg/6ml	30
TR-FB034356	Finisterre OA™ WAX SPE Columns 200mg/6ml	30
TR-FB034358	Finisterre OA™ WAX SPE Columns 500mg/6ml	30

Equivalences

Teknokorma	Waters	Phenomenex	Agilent	Biotage
Finisterre OA™ HLB	Waters Oasis® HLB	Phenomenex Strata™-X	Agilent Bond Elut Plexa / Agilent Nexus	Biotage Evolute® ABN
Finisterre OA™ DVB	Waters Oasis® HLB	Phenomenex Strata™-X	Agilent Bond Elut PPL / Agilent Simplic DVB	Biotage Evolute® ABN
Finisterre OA™ SCX	Waters Oasis® MCX	Phenomenex Strata™-X-C	Agilent Bond Elut Plexa PCX / Agilent Simplic SCX	Biotage Evolute® CX
Finisterre OA™ SAX	Waters Oasis® MAX		Agilent Simplic SAX	Biotage Evolute® AX
Finisterre OA™ WCX	Waters Oasis® WCX	Phenomenex Strata™-X-CW	Agilent Simplic WCX	Biotage Evolute® WCX
Finisterre OA™ WAX	Waters Oasis® WAX	Phenomenex Strata™-X-AW	Agilent Simplic WAX	Biotage Evolute® WAX

Finisterre™ C18 SPE 96 well plate



Retention Mechanism: Reverse phase, one of the most hydrophobic phases

Functional Group: Polymerically bonded octadecyl C18 endcapped. High Capacity C18

Endcapped: yes

Higher Carbon Load: 17.0 %

Silica Base: Irregular Shape

Average Particle Size: 50 μm

Pore Diameter: 60 Å

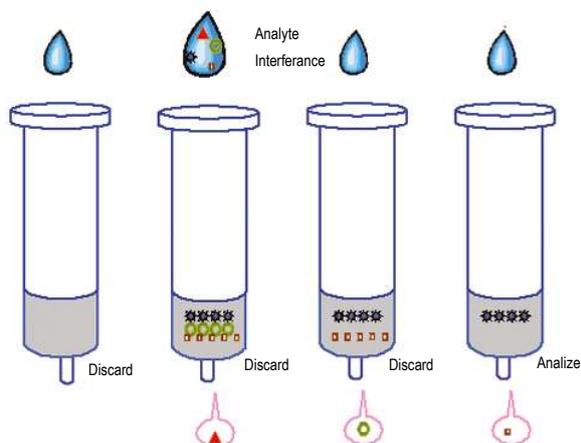
Hardware: Polypropylene

Frit: Polyethylene 20 μm porosity

96 well plate format

Cat.No	Description	pk
TR-F034500	Finisterre SPE 96 w/plate C18/17% 10mg/2ml	1
TR-F034502	Finisterre SPE 96 w/plate C18/17% 20mg/2ml	1
TR-F034504	Finisterre SPE 96 w/plate C18/17% 30mg/2ml	1
TR-F034506	Finisterre SPE 96 w/plate C18/17% 60mg/2ml	1
TR-F034508	Finisterre SPE 96 w/plate C18/17% 1000mg/2ml	1

Finisterre™ Use & Extraction Procedures



Select the different Extraction Procedures Methods:

Extraction Procedures for Reversed Phases

Packings of Reverse Phase are composed of a silica backbone bonded with hydrocarbon chains.

Packings of Reverse Phase are used to isolate relatively non-polar compounds from a polar matrix.

Reverse Phase packings require conditioning with an organic solvent followed by an aqueous solvent prior to use.

Elution of non-polar compounds requires less polar solvents, and moderately polar compounds is accomplished with middle polarity solvents.

1. Conditioning:

Rinse packing bed with 3-5 ml of methanol followed by 3-5 ml of water or buffer (don't let packing bed dry before adding sample).

2. Sample application:

Apply sample solution to the top of the packing bed. Push or draw the sample through the bed at a flow rate of 1-5 ml/min. Collect sample for analysis if desired compound has passed through the packing bed without being retained.

3. Wash:

If the desired compound was retained, wash off any weakly retained interfering compound(s) with a polar solvent.

4. Elution:

Elute desired compound with 1-2 ml of a non-polar solvent and collect for analysis.

Extraction Procedures for Normal Phases

Normal-phase packings are composed of a silica backbone bonded with carbon chains containing polar functional groups.

Packings of Normal Phase are used to isolate polar compounds from a non-polar matrix.

Normal Phase packings require conditioning with non-polar solvents. Elution is accomplished with more polar solvents.

1. Conditioning:

Rinse packing bed with 3-5 ml of non-polar solvent (don't let packing bed dry before adding sample).

2. Sample application:

Apply sample solution to the top of the packing bed. Push or draw the sample through the bed at a flow rate of 1-5 ml/min. Collect sample for analysis if desired compound has passed through the packing bed without being retained.

3. Wash:

If the desired compound was retained, wash off any weakly retained interfering compound(s) with a non-polar solvent.

4. Elution:

Elute desired compound with 1-2 ml of a polar solvent and collect for analysis.

Extraction Procedures for Ion-Exchange

Packings of Ion Exchange are composed of different materials backbone bonded with carbon chains terminated by a negatively or positively charged functional groups.

Packings of Ion Exchange are used to isolate charged or potentially charged compounds.

Anions and cations are retained on the corresponding resin by exchanging the anion or cation in the sample with the anion or cation on the resin.

1. Conditioning:

Rinse packing bed with 3-5 ml of de-ionized water or low ionic strength buffer (e.g. 0.0001M-0.01M).

2. Sample application:

Apply sample to the top of the packing bed. Push or draw the sample through the bed at a flow rate of 1-2 ml/min. Collect sample for analysis if desired compound has passed through the packing bed without being retained.

3. Wash:

If the desired compound was retained, wash off any weakly retained interfering compound(s) with de-ionized water or low strength buffer.

4. Elution:

Elute desired compound with 1-5 ml of a high salt concentration solution (e.g. 0.1M- 0.5M) or change elution buffer pH such that the sample compound is no longer ionized and collect for analysis.