biocomma

Copure®

2019

Solid Phase Extraction

Copure® solid phase extraction products include SPE Cartridges, QuEChERS, Immunoaffinity Columns, SPE device and chromatographic consumables, are widely used in food safety, textile/leather inspection, environmental protection and clinical diagnosis, etc.

BIOCOMMA LIMITED SPE Innovation Expert

www.biocomma.com

Company Profile

Biocomma Limited, founded in 2006, has formed two technology platforms of porous plastic filters and separation materials, is the leading manufacturer of sample preparation, sample filtration and sample collection products.

Biocomma Limited is ISO9001:2015 certificated and a National High-Tech enterprise, owns three facilities& three laboratories, supplying more than 1500 products. Over the past ten years, we have served over 4000 customers and provided OEM and custom services for dozens of well-known brands around the world.

CONTENTS

Solid Phase Extraction Products

Copure® Brand

Copure® products focus on sample preparation of complicated matrix, aiming to deliver the following values for our customers:

Consistent——Achieving satisfactory recovery and repeatability for each analyte.
Pure——Eliminating matrix interference to obtain clean chromatogram for the sample.

Features of Copure® Products:

- Verified Performance--Each batch of SPE cartridges are verified to meet performance specifications and results are accessible from Biocomma.
- Application Notes--Applications notes are provided for free and continuously updated by Biocomma.
- Custom Services--By scanning the QR code in the packaging, customers can get technical support via mobile app WeChat.

Copure® product line includes: Polymeric SPE, Silica-based SPE, Supported Liquid Extraction (SLE), Dispersive SPE (QuEChERS) and Specialty SPE.

Brands

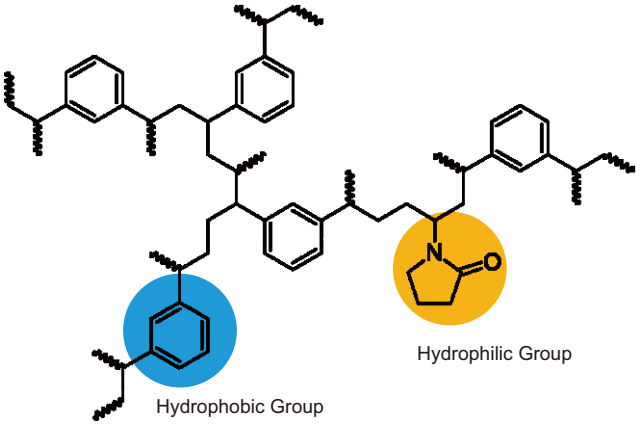
biocomma®	Copure®	Embed™	CommaXP™	H2OStop®
Frits and empty columns for laboratory solid-liquid separation.	Verified SPE cartridges and QuEChERS kits for sample preparation.	Oligo synthesis products powered by our CPG-PE sintered technology.	Columns and kits for purification of nucleic acids, proteins and antibodies.	Self-sealing filters for medical usage.
4Tip™	SpinFlow™	Silibase®	CommaTip™	CommaVac™
Sintered PE filters for pipette tips.	Parts for spin column-based nucleic acid purification.	SPE cartridges specially optimized for large amount usage in third-party organizations.	Instruments and kits for IVD nucleic acid purification.	Vacuum manifolds for laboratory sample preparation.

Building Your Brand

Biocomma helps you build your own SPE brands, based on our Copure® product line, as easy as printing a logo.

HLB Hydrophilic-Lipophilic Balanced

Extracting non-polar to moderately polar acidic, neutral and basic compounds



HLB sorbent is composed of monodisperse N-vinylpyrrolidone-divinylbenzene copolymer resin particles, with specific mixture of hydrophilic hydrophobic groups, allowing for retention for a wide range of compounds with very high capacities.

HLB can be used as a general-purpose sorbent, especially for extracting analytes from complicated samples such as blood and urine.

- General sorbent, suitable for wide application areas
- Highly wettable, no worry of bed dryness, rare breakthrough
- High recoveries, excellent reproducibilities
- 3 to 10 times higher adsorption capacities and loadabilities than C18 - bounded silica gel
- Stable from pH 1 to 14, compatible with most common solvents

Specifications

Surface area: 600 m^2/g
Particle size: 40 μm
Pore size: 300 Å

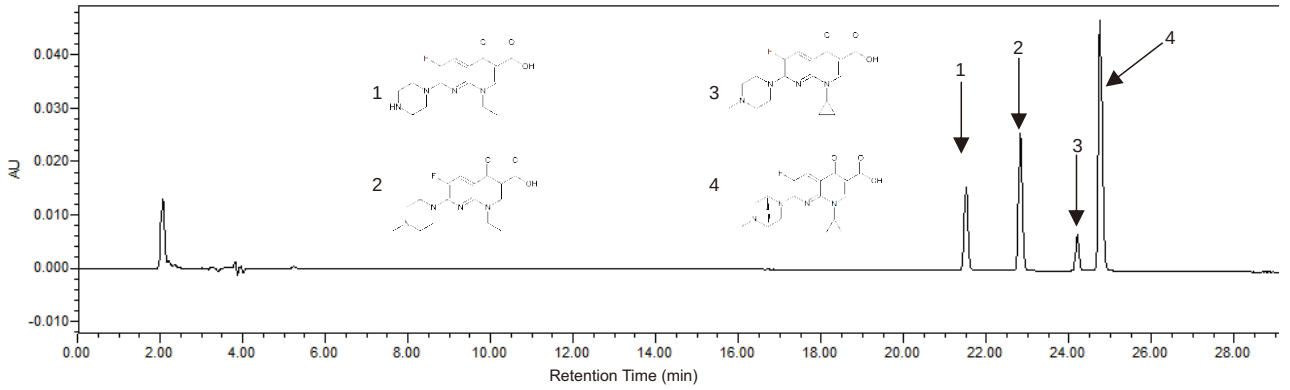
Applications

- Determination of drugs, illicit drugs and their metabolites in blood, such as sertraline ibuprofen and heroin
- Determination of residual antibiotics, catecholamines, and microcystins in foodstuff
- Determination of veterinary drugs, pesticides and mycotoxin in milk products

Related Methods

- GB/T 21315-2007 Determination of penicillins residues in foodstuffs of animal origin LC-MS/MS method
- GB/T 21313-2007 Analysis of β-agonists in foods of animal origin by high performance liquid chromatography tandem mass spectrometry
- GB 29685-2013 Determination of Lincomycin, Clindamycin and Spectinomycin residues in animal derived food by Gas Chromatography Mass Spectrometric method
- GB 29682-2013 National Food Safety Standard Determination of Penicillins residues in aquatic products by High Performance Liquid Chromatographic method
- NY/T 2067-2011 Determination of 13 sulfonylurea herbicides residues in soil by LC/MS/MS
- SN/T 2050-2008 Determination of 14 beta-lactam antibiotic residues in foodstuffs of animal origin for export and import - LC-MS/MS method
- SN/T 2654-2010 Determination of moroxydine residues in foodstuffs of animal origin for export and import - LC-MS/MS method
- SN/T 2222-2008 Determination of glucocorticosteroids residues in foodstuffs of animal origin for import and export - LC-MS/MS method
- GB5009.111-2016 Determination of Deoxynivalenol and its acetylated derivatives in food

Application: Determination of Quinolones in foods



SPE Cartridge: Biocomma HLB, 200mg/3mL
System: Waters alliance 2690
Column: Welch Ultimate XB-C18 (4.6*250mm)
Mobile phase A: acetronile
Mobile phase B: water containing 0.1% formic acid
Flowrate: 1 mL/min
Column temperature: room temperature
Injection volume: 20 μL
Detector: UV at 220 nm

Gradient:

Step	Time(min)	A%	B%
1	0	9	91
2	11	9	91
3	20	29	71
4	25	37	63
5	26	100	0
6	30	100	0
7	21	9	91
8	36	9	91

Results

Peak	Retention time (min)	Analyte	Recovery(%)
1	21.508	Enoxacin	92.8
2	22.820	Pefloxacin	82.4
3	24.201	Danofloxacin	93.8
4	24.754	Enrofloxacin	81.2

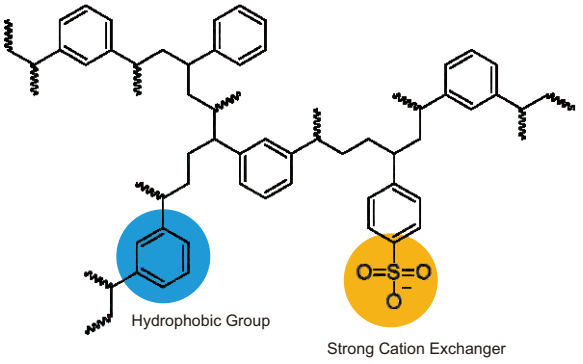
The results suggest that recoveries of > 80% are obtained by using Biocomma HLB cartridges to extract the four Quinolones in foods, meeting the criteria of China official method GB/T 21312-2007.

Order Information

Cat.#	Format	Qty.
COHLB130	30mg/1mL	100/Box
COHLB1100	100mg/1mL	100/Box
COHLB330	30mg/3mL	50/Box
COHLB360	60mg/3mL	50/Box
COHLB3200	200mg/3mL	50/Box
COHLB3500	500mg/3mL	50/Box
COHLB6150	150mg/6mL	30/Box
COHLB6200	200mg/6mL	30/Box
COHLB6500	500mg/6mL	30/Box
COHLB12500	500mg/12mL	20/Box

MCX Mixed-mode Cation Exchange

Extracting basic compounds



MCX sorbent is composed of monodisperse polystyrene-divinylbenzene resin particles grafted with aromatic sulfonic acid groups. This polymeric mixed-mode sorbent features reversed-phase and strong cation exchange retention mechanisms, allowing for superb retention for basic compounds.

- Superb retention for basic compounds
- High surface area, high ion exchange capacities
- Stable from pH 1 to 14, compatible with most common solvents

Specifications

Surface area: 600 m^2/g
Particle size: 40 μm
Pore size: 300 Å

Applications

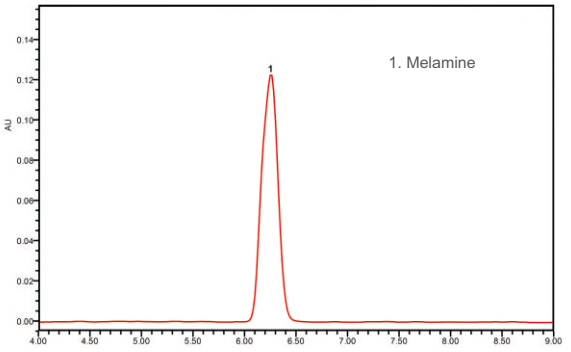
- Determination of residual pesticides / veterinary drugs in foodstuff, such as clenbuterol
- Analysis of drugs and drug metabolites in biological matrices

Related Methods

- GB/T 22388-2008 Determination of melamine in raw milk and dairy products
- GB 29694-2013 National Food Safety Standard - Determination of Residual 13 Types of Sulfonamides in Animal Food - High Performance Liquid Chromatography
- GB/T 22286-2008 Determination of beta-Agonists residues in foodstuff of animal origin - Liquid chromatography with tandem-mass spectrometric method

Application

Determination of Melamine spiked at 0.25 mg/kg in milk

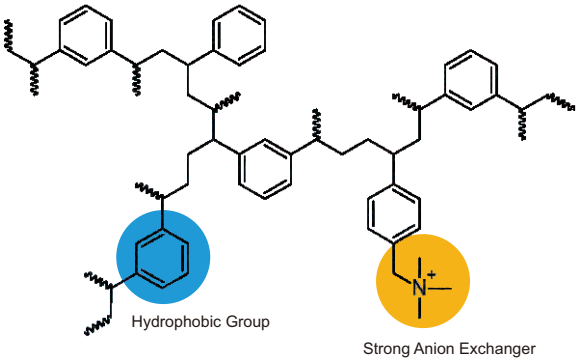


Order Information

Cat.#	Format	Qty.
COMCX130	30mg/1mL	100/Box
COMCX1100	100mg/1mL	100/Box
COMCX330	30mg/3mL	50/Box
COMCX360	60mg/3mL	50/Box
COMCX3200	200mg/3mL	50/Box
COMCX3500	500mg/3mL	50/Box
COMCX6150	150mg/6mL	30/Box
COMCX6200	200mg/6mL	30/Box
COMCX6500	500mg/6mL	30/Box
COMCX12500	500mg/12mL	20/Box

MAX Mixed-mode Anion Exchange

Extracting acidic compounds



MAX sorbent is composed of monodisperse polystyrene-divinylbenzene resin particles grafted with aromatic quaternary ammonium groups. This polymeric mixed-mode sorbent features reversed-phase and strong anion exchange retention mechanisms, allowing for superb retention for acidic compounds.

- Wettable, rare breakthrough
- Stable from pH 1 to 14, compatible with most common solvents
- General sorbents for acidic compounds

Specifications

Surface area: 600 m^2/g
Particle size: 40 μm
Pore size: 300 Å

Applications

- Determination of residual pesticides / veterinary drugs in foodstuff
- Analysis of drugs and drug metabolites in biological matrices
- Analysis of active ingredients in cosmetics

Related Methods

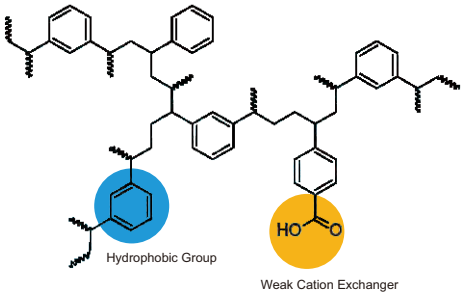
- GB/T 20746-2006 Method for the determination of the residues of carbadox olaquindox and related metabolites in bovine and porcine liver and muscle tissues - LC-MS-MS method
- GB/T 22992-2008 Determination of virginiamycin residue in bovine milk and milk powder - LC-MS-MS method
- GB/T 5009.96-2016 Determination of Ochratoxin A in foodstuff
- GB/T 5009.185-2016 Determination of Patulin A in foodstuff

Order Information

Cat.#	Format	Qty.
COMAX130	30mg/1mL	100/Box
COMAX1100	100mg/1mL	100/Box
COMAX330	30mg/3mL	50/Box
COMAX360	60mg/3mL	50/Box
COMAX3200	200mg/3mL	50/Box
COMAX3500	500mg/3mL	50/Box
COMAX6150	150mg/6mL	30/Box
COMAX6200	200mg/6mL	30/Box
COMAX6500	500mg/6mL	30/Box
COMAX12500	500mg/12mL	20/Box

WCX Weak Cation Exchange

Extracting strong bases



WCX sorbent is composed of monodisperse microporous polystyrene-divinylbenzene resin particles grafted with carboxylic acid groups. This polymeric mixed-mode sorbent features reversed-phase and weak cation exchange retention mechanisms, allowing for superb retention for strong bases such as quaternary ammonium cations.

- Superb retention for strong bases
- Predictable single retention mechanism
- Stable from pH 1 to 14, compatible with most common solvents

Specifications

Surface area: 600 m^2/g
Particle size: 40 µm
Pore size: 300 Å

Applications

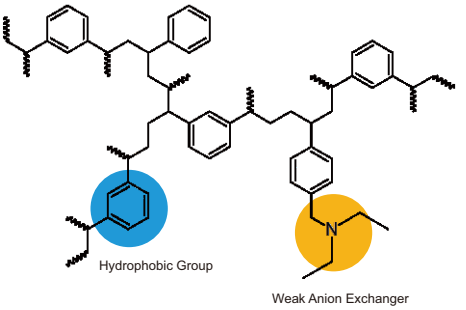
- Analysis of strong basic drugs in biological matrices
- New drug discovery

Order Information

Cat.#	Format	Qty.
COWCX130	30mg/1mL	100/Box
COWCX1100	100mg/1mL	100/Box
COWCX330	30mg/3mL	50/Box
COWCX360	60mg/3mL	50/Box
COWCX3200	200mg/3mL	50/Box
COWCX3500	500mg/3mL	50/Box
COWCX6150	150mg/6mL	30/Box
COWCX6200	200mg/6mL	30/Box
COWCX6500	500mg/6mL	30/Box
COWCX12500	500mg/12mL	20/Box

WAX Weak Anion Exchange

Extracting strong acids



WAX sorbent is composed of monodisperse microporous polystyrene-divinylbenzene resin particles grafted with amine functional groups. This polymeric mixed-mode sorbent features reversed-phase and weak anion exchange retention mechanisms, allowing for superb retention for strong acids.

- Superb retention for strong acids
- Predictable single retention mechanism
- Stable from pH 1 to 14, compatible with most common solvents

Specifications

Surface area: 600 m^2/g
Particle size: 40 µm
Pore size: 300 Å

Applications

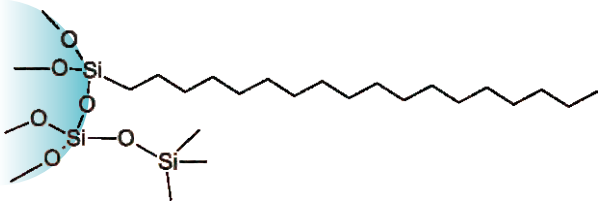
- Analysis of strong acids drugs in biological matrices
- Determination of strong acidic pollutants such as perfluorinated carboxylic acids in environment and water
- New drug discovery

Order Information

Cat.#	Format	Qty.
COWAX130	30mg/1mL	100/Box
COWAX1100	100mg/1mL	100/Box
COWAX330	30mg/3mL	50/Box
COWAX360	60mg/3mL	50/Box
COWAX3200	200mg/3mL	50/Box
COWAX3500	500mg/3mL	50/Box
COWAX6150	150mg/6mL	30/Box
COWAX6200	200mg/6mL	30/Box
COWAX6500	500mg/6mL	30/Box
COWAX12500	500mg/12mL	20/Box

C18 Endcapped Octadecyl

Extracting non-polar compounds



C18 sorbent is composed of endcapped octadecyl-bounded silica gel particles and retains non-polar compounds by hydrophobic interactions. It can retain most organic compounds and is widely used in areas such as environmental monitoring and food safety.

- High carbon content
- Fully endcapped surface coverage, reducing interference from basic and polar compounds
- Stable over a broader pH range

Specifications

Carbon content: 17.6%
Surface area: 300 m^2/g
Particle size: 40-75 μm
Pore size: 70 Å

Applications

- Analysis of drugs, poisons, pollutants and their metabolites in biological matrices
- Separation of biomolecules such lipids, antibiotics, bile acids and saccharides
- Determination of mycotoxins such as fumonisins in foods
- Determination of preservatives in cosmetics and skin care products

Related Methods

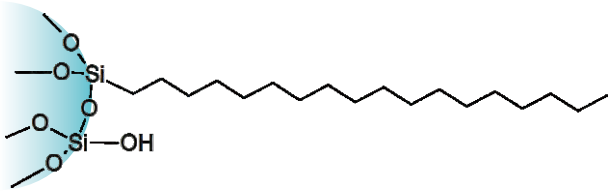
- GB/T 29598-2013 Limit and determination of triazines in fluorescent brighteners
- GB/T 21323-2007 Determination of aminoglycosides residues in animal tissues—HPLC-MS/MS method
- NY/T 1616-2008 Determination of 9 sulfonylurea herbicides residues in soils by LC-MS

Order Information

Cat.#	Format	Qty.
COC181100	100mg/1mL	100/Box
COC183200	200mg/3mL	50/Box
COC183500	500mg/3mL	50/Box
COC186500	500mg/6mL	30/Box
COC1861000	1000mg/6mL	30/Box
COC18121000	1000mg/12mL	20/Box
COC18122000	2000mg/12mL	20/Box

C18N Unendcapped Octadecyl

Extracting polar and non-polar compounds



C18N sorbent is composed of octadecyl-bounded silica gel particles. In addition to strong retention for non-polar compounds by hydrophobic interactions, it provides retention for basic compounds due to residual silanols. C18N is a general-purpose sorbent capable of retaining both polar and non-polar compounds.

- High carbon content
- Abundant residual silanols
- General-purpose sorbent

Specifications

Carbon content: 17%
Surface area: 300 m^2/g
Particle size: 40-75 μm
Pore size: 100 Å

Applications

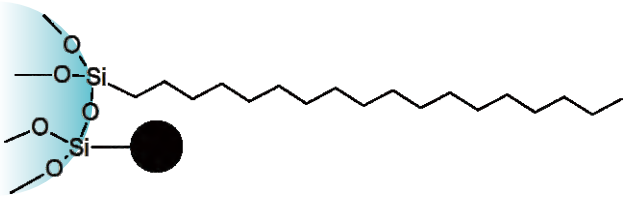
- Determination of organic pollutants such as polycyclic aromatic hydrocarbons (PAHs) in soils
- Determination of pesticides and veterinary drugs such as antibiotics in foods
- Analysis of pigments and saccharides in food
- Desalting of aqueous solutions before ion exchange

Order Information

Cat.#	Format	Qty.
COC18N1100	100mg/1mL	100/Box
COC18N3200	200mg/3mL	50/Box
COC18N3500	500mg/3mL	50/Box
COC18N6500	500mg/6mL	30/Box
COC18N61000	1000mg/6mL	30/Box
COC18N121000	1000mg/12mL	20/Box
COC18N122000	2000mg/12mL	20/Box

C18A Unendcapped Octadecyl

Extracting non-polar compounds



C18A sorbent is composed of octadecyl-bounded silica gel particles and retains non-polar compounds by hydrophobic interactions.

Hydrophilic surface modification makes C18A wettable and prevents its carbon chains from collapsing in aqueous solutions. Due to its compatibility with aqueous mobile phases, even pure water can be used, and silica particles are more stable.

- Compatible with aqueous solutions
- Additional retention for polar compounds

Specifications

Carbon content: 12%
Surface area: 300 m^2/g
Particle size: 40-75 μm
Pore size: 100 Å

Applications

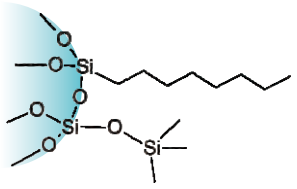
- Desalting of biological macromolecules such as nucleic acids, proteins and peptides.
- Determination of drugs, pesticides and organic pollutants in water, such as polycyclic aromatic hydrocarbons (PAHs)

Order Information

Cat.#	Format	Qty.
COC18A1100	100mg/1mL	100/Box
COC18A3200	200mg/3mL	50/Box
COC18A3500	500mg/3mL	50/Box
COC18A6500	500mg/6mL	30/Box
COC18A61000	1000mg/6mL	30/Box
COC18A121000	1000mg/12mL	20/Box
COC18A122000	2000mg/12mL	20/Box

C8 Octyl

Extracting non-polar compounds



C8 sorbent is composed of octyl-bounded silica gel particles and retains non-polar compounds by hydrophobic interactions.

Compared with C18, C8 has shorter carbon chains and moderate hydrophobicity, thus makes an alternative for extracting compounds that are strongly retained by C18 sorbent.

- Moderate hydrophobicity
- Capable of extracting compounds which are strongly retained by C18

Specifications

Carbon content: 9%
Surface area: 280 m^2/g
Particle size: 40-75 μm
Pore size: 100 Å

Applications

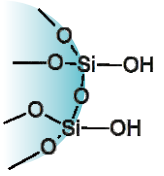
- Extraction of hydrophilic and lipophilic vitamins in plasma
- Determination of residual hormones in meat
- Determination of residual pesticides in waste
- Desalting of biological macromolecules

Order Information

Cat.#	Format	Qty.
COC81100	100mg/1mL	100/Box
COC83200	200mg/3mL	50/Box
COC83500	500mg/3mL	50/Box
COC86500	500mg/6mL	30/Box
COC861000	1000mg/6mL	30/Box
COC8121000	1000mg/12mL	20/Box
COC8122000	2000mg/12mL	20/Box

Silica Unbounded Silica Gel

Extracting polar compounds



Silica is an unbounded silica gel sorbent. It has the strongest polarity among all normal phase sorbents, able to retain polar compounds in samples, particularly compounds with a similar structure.

- Very strong retention for polar compounds
- High sample loadabilities
- Capable of separating compounds with a similar structure

Specifications

Surface area: 480 m^2/g
Particle size: 40-75 μm
Pore size: 70 Å

Applications

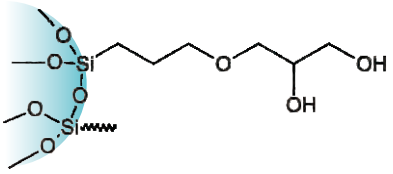
- Analysis of drugs, poisons, pollutants and their metabolites in biological matrices
- Separation of biomolecules such lipids, antibiotics, bile acids and saccharides
- Determination of mycotoxins such as fumonisins in foods
- Determination of preservatives in cosmetics and skin care products

Order Information

Cat.#	Format	Qty.
COSIL1100	100mg/1mL	100/Box
COSIL3200	200mg/3mL	50/Box
COSIL3500	500mg/3mL	50/Box
COSIL6500	500mg/6mL	30/Box
COSIL61000	1000mg/6mL	30/Box
COSIL121000	1000mg/12mL	20/Box
COSIL122000	2000mg/12mL	20/Box

Diol Dihydroxy

Used in normal or reversed phase, extracting polar compounds



Diol is a dihydroxy bonded silica sorbent similar to unbounded silica sorbent in its capabilities. In addition to its normal retention resulting from strong hydrogen bonding with analytes, the hydrophobic spacers of its functional groups serve to reversed phase retention to a certain extent.

Diol is an alternative to un-bonded silica sorbent if the latter's strong acidity leads to retention of basic interferences.

- Capable of polar and non-polar retention
- Similar to un-bonded silica sorbent in its capabilities
- Reduced retention of basic interferences

Specifications

Carbon content: 5.5%
Surface area: 480 m^2/g
Particle size: 40 - 75 μm
Pore size: 70 Å

Applications

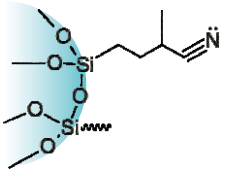
- Analysis of phenols, pigments and phospholipids in plant oils
- Determination of drugs and their metabolites in biological fluids such as urine
- Separation of glycan mixtures

Order Information

Cat.#	Format	Qty.
CODI1100	100mg/1mL	100/Box
CODI3200	200mg/3mL	50/Box
CODI3500	500mg/3mL	50/Box
CODI6500	500mg/6mL	30/Box
CODI61000	1000mg/6mL	30/Box
CODI121000	1000mg/12mL	20/Box
CODI122000	2000mg/12mL	20/Box

CN Cyanopropyl

Extracting polar and non-polar compounds, enriching metal ions



CN is a cyanopropyl bounded silica sorbent, weakly hydrophilic, used as normal phase or reversed phase. It is able to extract non-polar or weakly polar acids, neutrals and bases from aqueous solutions when used as a reversed phase sorbent. It is also able to extract polar compounds from nonpolar organic solutions when used as a normal phase sorbent. Besides, cyanopropyl is a ligand that can be used to enrich some metal ions.

- Compatible with biological matrices
- Polarity adjustable by changing ratio of solvents

Specifications

Carbon content: 5.8%
Surface area: 480 m^2/g
Particle size: 40 - 75 μm
Pore size: 70 Å

Applications

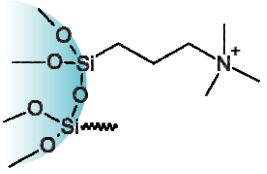
- Analysis of drugs and drug metabolites (such as steroids) in biological fluids
- Determination of residual pesticides / veterinary drugs in food and milk

Order Information

Cat.#	Format	Qty.
COCN1100	100mg/1mL	100/Box
COCN3200	200mg/3mL	50/Box
COCN3500	500mg/3mL	50/Box
COCN6500	500mg/6mL	30/Box
COCN61000	1000mg/6mL	30/Box
COCN121000	1000mg/12mL	20/Box
COCN122000	2000mg/12mL	20/Box

SAX Strong Anion Exchange

Extracting acidic compounds



SAX is a silica-based strong anion exchanger. Its quaternary ammonium ligand is always positively charged and engenders very strong anion exchange capacity. SCX is able to extract acidic compounds such as carboxylic acids.

- Very strong anion exchange interaction with acidic compounds
- Capable of retaining compounds that are not retained weak anion exchange sorbents
- Simple retention mechanism, with minimal secondary interactions

Specifications

Surface area: 480 m^2/g
Particle size: 40 - 75 μm
Pore size: 70 Å

Applications

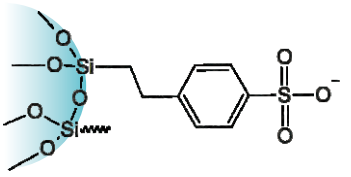
- Removal of negatively charged substances such as organic acids, nucleotides, sulfonic acids and inorganic anions from samples
- Determination of hormones in meat
- Determination of sulfonylurea herbicides in soil, vegetables and cereals

Order Information

Cat.#	Format	Qty.
COSAX1100	100mg/1mL	100/Box
COSAX3200	200mg/3mL	50/Box
COSAX3500	500mg/3mL	50/Box
COSAX6500	500mg/6mL	30/Box
COSAX61000	1000mg/6mL	30/Box
COSAX121000	1000mg/12mL	20/Box
COSAX122000	2000mg/12mL	20/Box

SCX Strong Cation Exchange

Extracting basic compounds



SCX is a silica-based strong cation exchanger. Its pheylsulfonic acid ligand engenders strong cation exchange capacity, while the benzene ring gives rise to additional non-polar interactions. SCX is able to extract positively charged basic compounds such as amines.

- Low pKa, enabling strong interaction with basic compounds
- Electrical charge of sulfonic acid changeable by adjusting pH of eluent, ensuring convenient elution

Specifications

Surface area: 480 m^2/g
Particle size: 40 - 75 μm
Pore size: 70 Å

Applications

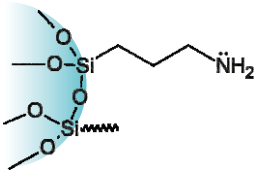
- Determination of residual pesticides / veterinary drugs in foodstuff, such as macrolides
- Determination of illicit drugs, such as amphetamine
- Analysis of drugs and drug metabolites in biological matrices

Order Information

Cat.#	Format	Qty.
COSCX1100	100mg/1mL	100/Box
COSCX3200	200mg/3mL	50/Box
COSCX3500	500mg/3mL	50/Box
COSCX6500	500mg/6mL	30/Box
COSCX61000	1000mg/6mL	30/Box
COSCX121000	1000mg/12mL	20/Box
COSCX122000	2000mg/12mL	20/Box

NH_2 Aminopropyl

Extracting moderately polar and acidic compounds



Nh_2 sorbent is composed of aminopropyl-bounded silica gel. It retains analytes by strongly polar interactions in organic solutions and by weak anion exchange in aqueous solutions.

- Retaining compounds in normal phase or anion exchange mode
- Capable of cleaning up biological samples with complicated matrix components

Specifications

Carbon content: 4.5%
Surface area: 480 m^2/g
Particle size: 40 - 75 μm
Pore size: 70 Å

Applications

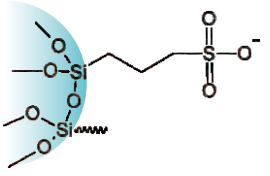
- Removal of negatively charged species such as sulfuric acids
- Determination of drugs and their metabolites such as β2-adrenergic agonists and salicylic acid in biological fluids (blood and urine)
- Determination of macrolide residues in foods and water

Order Information

Cat.#	Format	Qty.
CONH1100	100mg/1mL	100/Box
CONH3100	100mg/3mL	50/Box
CONH3200	200mg/3mL	50/Box
CONH3500	500mg/3mL	50/Box
CONH6200	200mg/6mL	30/Box
CONH6500	500mg/6mL	30/Box
CONH61000	1000mg/6mL	30/Box
CONH121000	1000mg/12mL	20/Box
CONH122000	2000mg/12mL	20/Box

PRS Propylsulfonic Acid

Extracting weak bases in biological fluids



PRS is a strong cation exchange sorbent with excellent retention for weakly basic compounds.

PRS shows unique selectivity owing to the absence of non-polar interactions. It is an alternative to SCX if non-polar components in samples couldn't be removed by using the latter.

- High recoveries for pyridinic compounds
- Simple retention mechanism, no non-polar interactions

Specifications

Carbon content: 4. 5%
Surface area: 480 m^2/g
Particle size: 40 - 75 μm
Pore size: 70 Å

Applications

- Determination of drugs and their metabolites in biological fluids
- Determination of basic pollutants such as malachite green gentian violet, tetrodotoxin and methylene blue

Related Methods

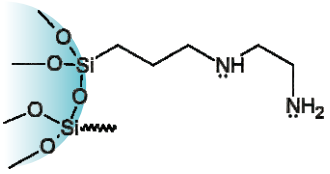
- NY/T 1756-2012 Determination of malachite green in feeds

Order Information

Cat.#	Format	Qty.
COPRS1100	100mg/1mL	100/Box
COPRS3200	200mg/3mL	50/Box
COPRS3500	500mg/3mL	50/Box
COPRS6500	500mg/6mL	30/Box
COPRS61000	1000mg/6mL	30/Box
COPRS121000	1000mg/12mL	20/Box

PSA Primary-Secondary Amine

Extracting strong acids, polar compounds and metal ions



PSA sorbent is similar to NH_2 sorbent, offering both normal phase and anion exchange retention mechanisms. Owing to the existence of primary and secondary amino groups (with pKa values 10.1 and 10.9, respectively), PSA has higher ion exchange capabilities and strong hydrogen bonding. Besides, PSA is able to form chelate complexes with some metal ions and used to enrich them.

- Higher capabilities than NH_2 sorbent
- Effectively removing acidic interferences in food samples

Specifications

Carbon content: 8%
Surface area: 480 m^2/g
Particle size: 50 - 75 μm
Pore size: 70 Å

Applications

- Determination of sedatives in body fluids
- Removal of interferences such as fatty acids, organic acids, pigments, sugars and metal ions

Related Methods

- NY/T 468-2006 Determination of residual clenbuterol in animal tissues gas chromatography/mass spectrometry

Order Information

Cat.#	Format	Qty.
COPSA1100	100mg/1mL	100/Box
COPSA3100	100mg/3mL	50/Box
COPSA3200	200mg/3mL	50/Box
COPSA3500	500mg/3mL	50/Box
COPSA6200	200mg/6mL	30/Box
COPSA6500	500mg/6mL	30/Box
COPSA61000	1000mg/6mL	30/Box
COPSA121000	1000mg/12mL	20/Box
COPSA122000	2000mg/12mL	20/Box

GCB Graphitized Carbon Black

Extracting herbicides in drinking water

Carb-GCB is composed of sheet-like, nonporous graphitized carbon black with aromatic six-member ring structure and positive charges. It has reversed phase and ion exchange retention mechanisms, retaining non-polar compounds, such as organochlorine pesticides, as well as polar compounds, such as surfactants.

Owing to its sheet-like, nonporous structure, Carb-GCB enables higher extraction speeds and capabilities than silica-based sorbents.

- Higher extraction speed and capability
- Suitable for large volume samples

Specifications

Surface area: 100 m^2/g
Particle size: 100-300 mesh

Applications

- Removal of pigments in vegetables and fruits.
- Determination of organochlorine pesticides, ethyl carbamate, alkaloids and mycotoxins in water, beverages, vegetables and seafood

Related Methods

- EPA Method 523: Determination of Triazine Pesticides and their Degradates in DrinkingWater by Gas Chromatography/Mass Spectrometry (GC/MS)
- EPA Method 535: Measurement of Chloracetanilide and Other Acetamide Herbicide Degradates in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)

Order Information

Cat.#	Format	Qty.
COGCB1100	100mg/1mL	100/Box
COGCB3200	200mg/3mL	50/Box
COGCB3500	500mg/3mL	50/Box
COGCB6500	500mg/6mL	30/Box
COGCB61000	1000mg/6mL	30/Box
COGCB121000	1000mg/12mL	20/Box
COGCB122000	2000mg/12mL	20/Box

Florisil Pesticide Grade Florisil

Extracting multiresidual pesticides

Pesticide grade Florisil is a selective adsorbent comprised of synthetic magnesium-silica gel activated at 675 ˚C. It's strongly polar, extremely active, highly porous and able to retain low to moderately polar compounds such as chlorine-, nitrogen- and phosphorus-containing pesticides.

In analysis of multiresidual pesticides, Florisil has proven to be an effective, low - cost choice, and adopted in the U.S. EPA method 608 and China NY/T method 761.

- Good retention for most pesticides
- Suitable for viscous samples
- Economical

Specifications

Particle size: 150-250 μm

Applications

- Determination of chlorine-, nitrogen- and phosphorus -containing pesticides in foods.
- Determination of mycotoxins in foods.

Related Methods

- EPA 608 Organochlorine Pesticides and PCBs by GC/HSD
- NY/T 761 Pesticide multiresidue sceen methods for determination of organophosphorus pesticides, organochlorine pesticides, pyrethroid pesticides and carbamate pesticedes in vegetables and fruits
- NY/T 1720-2009 Determination of Seven Benzoylurea Pesticides Residues in Fruits and Vegetables by HPLC
- SN/T 0134-2010 Determination for pesticide residues of 12 kinds of carbamates including oxamyl in foods for import and export. LC-MS/MS method
- GB 5009.265-2016 Determination for PAHs in foods

Order Information

Cat.#	Format	Qty.
COFL1100	100mg/1mL	100/Box
COFL3200	200mg/3mL	50/Box
COFL3500	500mg/3mL	50/Box
COFL6500	500mg/6mL	30/Box
COFL61000	1000mg/6mL	30/Box
COFL121000	1000mg/12mL	20/Box
COFL122000	2000mg/12mL	20/Box

ALA ALN ALB Alumina

Extracting aromatic amines

Alumina is an extremely polar sorbent, like silica. Its abundance of surface electrons induce π – π interaction with aromatic rings, giving rise to strongly polar retention and Lewis acidity. Compared with un-bonded silica, alumina is more stable in high pH conditions and suitable for extracting aromatic amines.

Alumina is available in acidic (ALA), neutral (ALN) and basic (ALB) formulations from which you can choose an appropriate one according to your specific applications.

- Good retention for electron-rich compounds such as aromatic amines
- More stable than un-bonded silica in high pH conditions
- High capabilities

Specifications

Surface area: >150 m^2/g

pH: 4.0 for ALA, 7.0 for ALN, 9.5 for ALB

Applications

- Analysis of amines, phenols and glycosides in biological matrices, such as pyrocatechol
- Determination of residual pesticides, veterinary drugs and pollutants in vegetables and fruits, such as Sudan dyes, malachite green and organophosphorus pesticides
- Determination of synthetic pigments in water
- Analysis of oil components

Related Methods

- GB/T 23816-2009 Method for determination of triazine herbicide residues in soybean
- GB/T 19681-2005 The method for the determination of Sudan dyes in foods-High performance liquid chromatography
- GB/T 20361-2006 Determination of malachite green and gentian violet residues in fishery products - High performance liquid chromatography with fluorescence detector
- NY/T 1756-2012 Determination of malachite green in feeds

Order Information

ALA – Acidic Alumina

Cat.#	Format	Qty.
COALA1100	100mg/1mL	100/Box
COALA3200	200mg/3mL	50/Box
COALA3500	500mg/3mL	50/Box
COALA6500	500mg/6mL	30/Box
COALA61000	1000mg/6mL	30/Box
COALA121000	1000mg/12mL	20/Box
COALA122000	2000mg/12mL	20/Box

ALN – Neutral Alumina

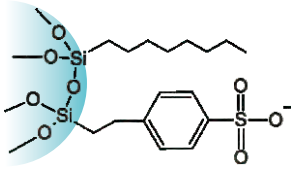
Cat.#	Format	Qty.
COALN1100	100mg/1mL	100/Box
COALN3200	200mg/3mL	50/Box
COALN3500	500mg/3mL	50/Box
COALN6500	500mg/6mL	30/Box
COALN61000	1000mg/6mL	30/Box
COALN121000	1000mg/12mL	20/Box
COALN122000	2000mg/12mL	20/Box

ALB – Basic Alumina

Cat.#	Format	Qty.
COALB1100	100mg/1mL	100/Box
COALB3200	200mg/3mL	50/Box
COALB3500	500mg/3mL	50/Box
COALB6500	500mg/6mL	30/Box
COALB61000	1000mg/6mL	30/Box
COALB121000	1000mg/12mL	20/Box
COALB122000	2000mg/12mL	20/Box

C8/SCX Octyl/Strong Cation Exchange

Extracting basic drugs in biological fluids



C8/SCX is composed of silica gel bounded with octyl and phenylsulfonic acid groups at a specific ratio. It's a mixed-mode sorbent with two retention mechanisms: octyl groups provide moderately hydrophobic interactions, phenylsulfonic acid groups provide strong cation exchange.

C8/SCX will be a better choice if very strong adsorption in C18, C8 or SCX packing results in difficult elution of some analytes.

- Moderate retention, avoiding extremely strong adsorption of some compounds
- Ideal for complicated samples such as blood and urine

Specifications

Surface area: 480 m^2/g
Particle size: 40 - 75 μm
Pore size: 70 Å

Applications

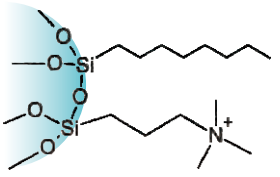
- Determination of drugs and their metabolites in biological fluids
- Determination of drugs of abuse such as cocaine, acetylcodeine, morphine and ketamine

Order Information

Cat.#	Format	Qty.
COC8SCX1100	100mg/1mL	100/Box
COC8SCX3200	200mg/3mL	50/Box
COC8SCX3500	500mg/3mL	50/Box
COC8SCX6500	500mg/6mL	30/Box
COC8SCX61000	1000mg/6mL	30/Box
COC8SCX121000	1000mg/12mL	20/Box
COC8SCX122000	2000mg/12mL	20/Box

C8/SAX Octyl/Strong Anion Exchange

Extracting acidic drugs in biological fluids



C8/SAX is composed of silica gel bounded with octyl and quaternary ammonium groups at a specific ratio. It's a mixed-mode sorbent with two retention mechanisms: octyl groups provide moderately hydrophobic interactions, quaternary ammonium groups provide strong anion exchange.

C8/SAX will be a better choice if very strong adsorption in C18, C8 or SAX packing results in difficult elution of some analytes.

- Moderate retention, avoiding extremely strong adsorption of some compounds
- Ideal for complicated samples such as blood and urine

Specifications

Surface area: 480 m^2/g
Particle size: 40 - 75 μm
Pore size: 70 Å

Applications

- Determination of drugs and their metabolites in biological fluids, such as barbiturates
- Determination of drugs of abuse such as THC

Order Information

Cat.#	Format	Qty.
COC8SAX1100	100mg/1mL	100/Box
COC8SAX3200	200mg/3mL	50/Box
COC8SAX3500	500mg/3mL	50/Box
COC8SAX6500	500mg/6mL	30/Box
COC8SAX61000	1000mg/6mL	30/Box
COC8SAX121000	1000mg/12mL	20/Box
COC8SAX122000	2000mg/12mL	20/Box

Carb-GCB/NH_2 Graphitized Carbon Black/Aminopropyl Bilayer

Cleanup of samples in multiresidual pesticide analysis

Carb - GCB/NH_2 combines the merits of both Carb-GCB and NH_2 sorbents and is able to remove interfering compositions such as pigments, sterols and fatty acids in food samples, making it an effective packing for cleaning samples up in multiresidual pesticide analysis.

- Ultrathin frits between two sorbent layers promising uniform flow
- Capable of removing interferences as thoroughly as possible

Specifications for Carb-GCB:

Surface area: 100 m^2/g
Particle size: 100-300 mesh

Specifications for NH_2

Carbon content: 4.5%
Surface area: 480 m^2/g
Particle size: 40-75 μm
Pore size: 70 Å

Applications

- Analysis of multiresidual pesticides in foods

Related Methods

- NY/T 1379-2007 Multi-residue Determination of 334 Pesticides in Vegetable by GC/MS and LC/MS

Order Information

Cat.#	Format	Qty.
CONHGC32525	250mg/250mg/3mL	50/Box
CONHGC655	500mg/500mg/6mL	30/Box
CONHGC653	300mg/500mg/6mL	30/Box

Carb-GCB/PSA Graphitized Carbon Black/ Primary-Secondary Amine Bilayer

Cleanup of samples in multiresidual pesticide analysis

Carb - GCB/PSA is a sorbent similar to Carb-GCB/NH_2 and suitable for cleaning samples up in multiresidual pesticide analysis.

Due to its additional secondary amino groups, PSA has higher ion exchange capability and ability to chelate some metal ions, thus providing Carb-GCB/PSA with unique selectivity different from Carb-GCB/NH_2.

- Ultrathin frits between two sorbent layers promising uniform flow
- Capable of removing interferences as thoroughly as possible
- Higher capabilities than Carb - GCB/NH_2

Specifications for Carb-GCB

Surface area: 100 m^2/g
Particle size: 100-300 mesh

Specifications for PSA

Carbon content: 8%
Surface area: 480 m^2/g
Particle size: 50 - 75 μm
Pore size: 70 Å

Applications

- Analysis of multiresidual pesticides in foods
- Determination of residual neonicotinoid pesticides in soil, fruit and wine samples

Order Information

Cat.#	Format	Qty.
COPSGC32525	250mg/250mg/3mL	50/Box
COPSGC655	500mg/500mg/6mL	30/Box
COPSGC653	300mg/500mg/6mL	30/Box

C18N300 Large Pore Size Unendcapped Octadecyl

Extracting polar and non-polar compounds, especially suitable for biological macromolecular desalting.

C18N300, its sorbents is octadecyl bonded silica gel, retains nonpolar compounds through hydrophobic action, the pore size up to 300A, especially suitable for biological macromolecular (nucleic acid, protein and polypeptide) desalting.

Specifications

Carbon content: 5%
Surface area: 85 m^2/g
Particle size: 40-75 μm
Pore size: 300 Å

PH Phenyl

PH Phenyl is extracting polar compounds, especially suitable for retaining planar structure or conjugated organic molecules.

PH, its sorbents is Phenyl bonded silica gel , compared with alkyl bonded phases (e.g. C18), it has different selectivity for target compounds. Similar to the polarity of C8, PH is suitable for retaining conjugated or aromatic ring compounds.

Specifications

Carbon content: 8.8%
Surface area: 300 m^2/g
Particle size: 40-75 μm
Pore size: 100 Å

PBA Phenyl Boric Acid

PBA Phenyl Boric Acid is extracting polar compounds, especially suitable for retaining Planar structure or conjugated organic molecules.

PBA, its sorbents is Phenyl boric acid bonded silica gel, retains analytes through reversible covalent bonds, shows the strong affinity for compounds containing cis-glycol structures, such as ribavirin, catechins, nucleic acids, some proteins, carbohydrates, etc.

Specifications

Carbon Content: 4.5%
Surface Area: 480 m^2/g
Particle Size: 40-75 μm
Pore Size: 70 Å

Related Methods

DB 32/T 1165-2007 Determination of total residues of ribavirin and its metabolites in chicken liver by LC-MS
SN/T 4519-2016 Determination of ribavirin residues in food of export animal origin by LC-MS/MS

Note: For special purpose SPE cartridges, please contact us.

Rimless SPE Cartridges

High-Throughput, Save More Space

Copure® Rimless SPE Cartridges, with its high density permutation, match with CommaVac™ Vacuum manifolds, are suitable for high- throughput extraction.

Features

- Rimless polypropylene tube, with higher density permutation
- Cartridge Volumn: 1 mL, 3 mL, 6 mL, 12 mL
  High Purity Frits, suitable for high sensitive analysis.
- Provide new generation polymer, classic silica-based and absorption sorbents.
- Matched with CommaVac ™ Vacuum manifold, suitable for high-throughput extraction

Polymer-based Rimless SPE Cartridge

Order Information

Sorbents	Cat.#					
	30mg/1mL	60mg/3mL	200mg/3mL	150mg/6mL	500mg/6mL	1000mg/12mL
HLB	RLHLB130	RLHLB360	RLHLB3200	RLHLB6150	RLHLB6500	RLHLB121000
MCX	RLMCX130	RLMCX360	RLMCX3200	RLMCX6150	RLMCX6500	RLMCX121000
MAX	RLMAX130	RLMAX360	RLMAX3200	RLMAX6150	RLMAX6500	RLMAX121000
WCX	RLWCX130	RLWCX360	RLWCX3200	RLWCX6150	RLWCX6500	RLWCX121000
WAX	RLWAX130	RLWAX360	RLWAX3200	RLWAX6150	RLWAX6500	RLWAX121000

Silica-based Rimless SPE

Order Information

Sorbents	Cat.#					
	100mg/1mL	200mg/3mL	500mg/3mL	500mg/6mL	1000mg/6mL	1000mg/12mL
C18	RLC181100	RLC183200	RLC183500	RLC186500	RLC1861000	RLC18121000
C8	RLC81100	RLC83200	RLC83500	RLC86500	RLC861000	RLC8121000
Silica	RLSIL1100	RLSIL3200	RLSIL3500	RLSIL6500	RLSIL61000	RLSIL121000
Diol	RLDI1100	RLDI3200	RLDI3500	RLDI6500	RLDI61000	RLDI121000
CN	RLCN1100	RLCN3200	RLCN3500	RLCN6500	RLCN61000	RLCN121000
Carb-GCB	RLGCB1100	RLGCB3200	RLGCB3500	RLGCB6500	RLGCB61000	RLGCB121000
Florisil	RLFL1100	RLFL3200	RLFL3500	RLFL6500	RLFL61000	RLFL121000
ALA	RLALA1100	RLALA3200	RLALA3500	RLALA6500	RLALA61000	RLALA121000
ALN	RLALN1100	RLALN3200	RLALN3500	RLALN6500	RLALN61000	RLALN121000
ALB	RLALB1100	RLALB3200	RLALB3500	RLALB6500	RLALB61000	RLALB121000
SCX	RLSCX1100	RLSCX3200	RLSCX3500	RLSCX6500	RLSCX61000	RLSCX121000
SAX	RLSAX1100	RLSAX3200	RLSAX3500	RLSAX6500	RLSAX61000	RLSAX121000
NH2	RLNH1100	RLNH3200	RLNH3500	RLNH6500	RLNH61000	RLNH121000
PSA	RLPSA1100	RLPSA3200	RLPSA3500	RLPSA6500	RLPSA61000	RLPSA121000
PRS	RLPRS1100	RLPRS3200	RLPRS3500	RLPRS6500	RLPRS61000	RLPRS121000

96-Well Solid Phase Extraction Plates

Specially for High-Throughput Applications

Copure® 96-well SPE Plates, based on Biocomma core accessories and SPE sorbents, and matched with CommaVac™ Vacuummanifold, are specially designed for high-throughput SPE applications.

Features

- Match with CommaVac™ Vacuum manifold, implement the high-throughput extraction.
- Provide new generation polymer and classic silica-based and absorption sorbents.
- Standard 96-well plates with 2 ml volume /well
- Use high purity frits to fix sorbents, suitable for high sensitive analysis without any impurities.

Polymer-based SPE 96-well Plates

Order Information

Sorbents	Cat.#		
	10mg/2mL/well	30mg/ 2mL/well	50mg /2mL/well
HLB	COHLB9610	COHLB9630	COHLB9650
MCX	COMCX9610	COMCX9630	COMCX9650
MAX	COMAX9610	COMAX9630	COMAX9650
WCX	COWCX9610	COWCX9630	COWCX9650
WAX	COWAX9610	COWAX9630	COWAX9650

Silica-based SPE 96-well Plates

Order Information

Sorbents	Cat.#		
	50mg/2mL/well	100mg/ 2mL/well	200mg /2mL/well
C18	COC189650	COC1896100	COC1896200
C8	COC89650	COC896100	COC896200
Silica	COSIL9650	COSIL96100	COSIL96200
Diol	CODI9650	CODI96100	CODI96200
CN	COCN9650	COCN96100	COCN96200
Carb-GCB	COGCB9650	COGCB96100	COGCB96200
Florisil	COFL9650	COFL96100	COFL96200
ALA	COALA9650	COALA96100	COALA96200
ALN	COALN9650	COALN96100	COALN96200
ALB	COALB9650	COALB96100	COALB96200
SCX	COSCX9650	COSCX96100	COSCX96200
SAX	COSAX9650	COSAX96100	COSAX96200
NH2	CONH9650	CONH96100	CONH96200
PSA	COPSA9650	COPSA96100	COPSA96200
PRS	COPRS9650	COPRS96100	COPRS96200

Overview

In 2003, Michelangelo Anastassiades and Steven J Lehotay scientists who developed similar groundbreaking methods to simplify the way labs prepare food samples pesticide analysis. It’s called QuEChERS. The “QuEChERS” (Quick, Easy, Cheap, Effective, Rugged, and Safe) method, dispersive SPE (dSPE), is a sample prep technique that has become popular in the area of multi-residue pesticide analysis in food and agricultural products.

Biocomma offers standard EN or AOAC QuEChERS kits, and also offers customized QuEChERS kits for customers, including different specifications of the centrifuge tube, extraction tube, purification tubes and reagents to help you quickly establish a standard detection method.

Features

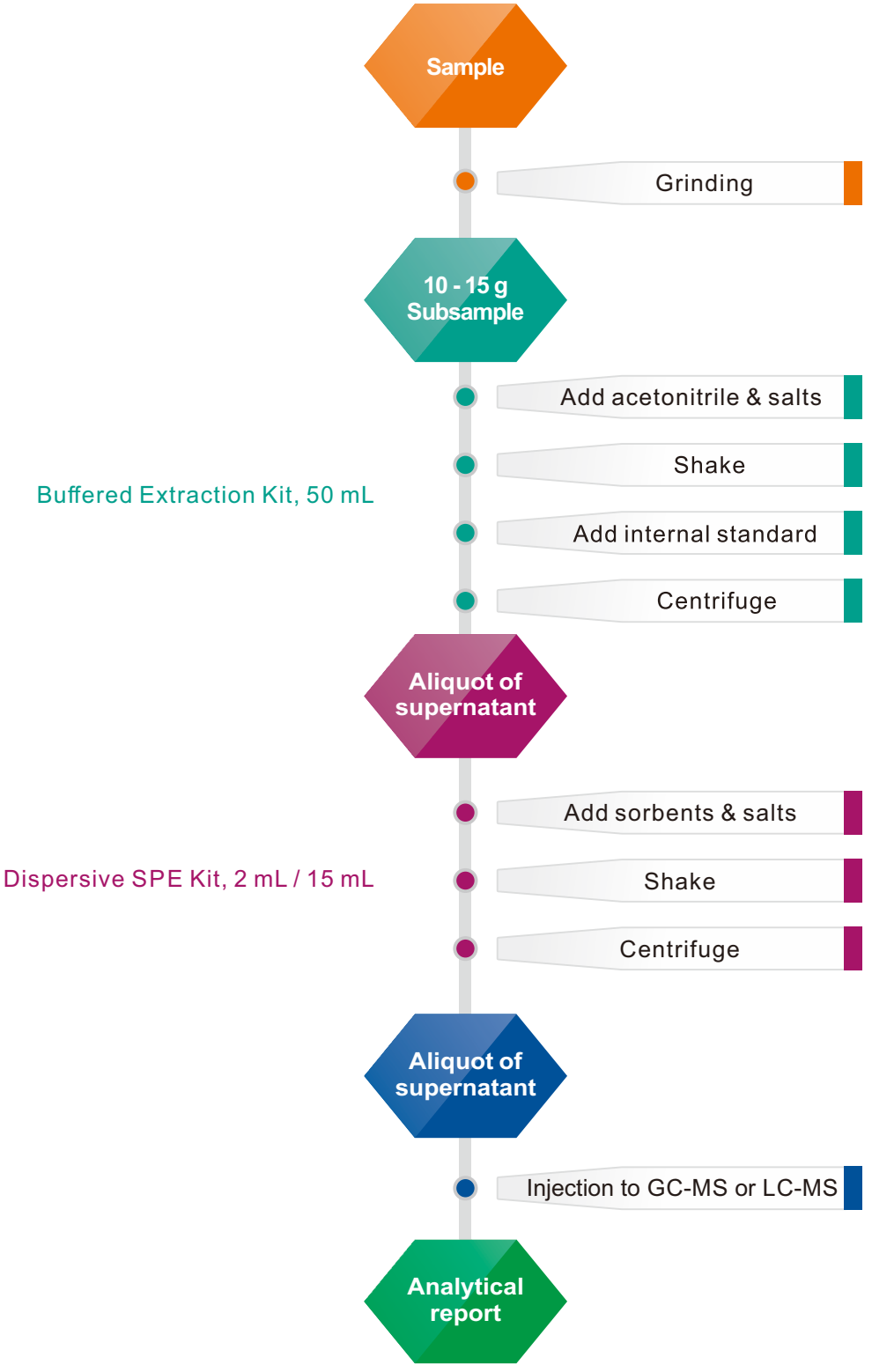
- Satisfactory recoveries for a wide variety of pesticides, veterinary drugs and additives in many food matrices
- Streamlined procedure with few simple steps, lowering potential errors
- Minimal organic solvent usage, safer for analysts and environment-friendly
- Saving time and cost significantly

Related Methods

Biocomma provides QuEChERS kits dedicated for most common methods:

- **EN 15662** Foods of plant origin-Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE-QuEChERS-method
- **AOAC Official Method 2007.01** Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate

Workflow


Sample
Grinding
10 - 15 g Subsample
Add acetonitrile & salts
Shake
Buffered Extraction Kit, 50 mL
Add internal standard
Centrifuge
Aliquot of supernatant
Add sorbents & salts
Dispersive SPE Kit, 2 mL / 15 mL
Shake
Centrifuge
Aliquot of supernatant
Injection to GC-MS or LC-MS
Analytical report

QuEChERS Extraction Kits

Copure® QuEChERS Kits includes extraction pouches and 50 mL centrifuge tubes, ceramic homogenizers are optional.

The pouches contain anhydrous extraction salts. Among the mixture, $MgSO_4$ is responsible for removing water in samples, while other components are responsible for maintaining appropriate pH to ensure the recoveries of alkaline-sensitive pesticides.

Directly adding water-abundant samples into tubes containing extraction salts may cause local overheating which compromise the resulting recoveries. To avoiding such situations, Biocomma provides separate extraction salt pouches that the operator can add extraction salts after the addition of organic solvents.

Copure® QuEChERS salts are sealed in aluminum foil bags to avoid leakage. The type and amount are printed on the bag for handy choice. The easy-cut mark is very convenient for use. Our automated powder dispensing & packaging assembly line promise the accuracy and repeatability.

Order Information

AOAC 2007.01 Kits

Cat.#	Description	Sorbents	Qty.
COQ050020H	Extraction Salts+50 mL Tube	6 g $MgSO_4$ 1.5 g NaOAc	50/Box
COQ050020CH	Extraction Salts+50 mL Tube+Ceramic Homogenizers		50/Box

EN 15662 Kits

Cat.#	Description	Sorbents	Qty.
COQ050010H	Extraction Salts+50 mL Tube	4g $MgSO_4$ 1g NaCl 1g Trisodium Citrate 0.5g Disodium Citrate	50/Box
COQ050010CH	Extraction Salts+50 mL Tube+Ceramic Homogenizers		50/Box

Original Method Kits

Cat.#	Description	Sorbents	Qty.
COQ050040H	Extraction Salts+50 mL Tube	4g $MgSO_4$ 1g NaCl	50/Box
COQ050040CH	Extraction Salts+50 mL Tube+Ceramic Homogenizers		50/Box

Ceramic Homogenizers

Cat.#	Description	Qty.
009903B	Ceramic Homogenizers, 50 mL	100/Bottle

QuEChERS Premixed Extraction Salts

Copure® QuEChERS Premixed Extraction Salts are suitable for various QuEChERS Standards and used in analysis of multi-residual pesticides.

Features

- Optimized premixed formula, more flexible operation
- Two packages optional: easy-cut pouches and bottle package
- Suitable for AOAC 2007, EN15662 standards, etc

Order Information

AOAC 2007.01 Kits

Cat.#	Description	Sorbents	Qty.
COQP6150	Extraction Pouches	6 g $MgSO_4$	50/Box
COQS6150	Bottled Premixed Extraction Salts	1.5 g NaOAc	1 kg/Bottle

EN 15662 Kits

Cat.#	Description	Sorbents	Qty.
COQP4115	Extraction Pouches	4g $MgSO_4$ 1g NaCl 1g Trisodium Citrate 0.5g Disodium Citrate	50/Box
COQS4115	Bottled Premixed Extraction Salts		1 kg/Bottle

Original Method Kits

Cat.#	Description	Sorbents	Qty.
COQP4100	Extraction Pouches	4g $MgSO_4$	50/Box
COQS4100	Bottled Premixed Extraction Salts	1g NaCl	1 kg/Bottle

QuEChERS Clean-up Kits

Copure® QuEChERS Clean-up Kits includes sorbents and $MgSO_4$, 2 mL and 15 mL centrifuge tubes, ceramic homogenizers are optional as well.

The sorbents include PSA/C18-EC/GCB, etc. PSA is to remove the fatty acids and organic acids in samples. C18-EC is to remove the fats in samples, GCB is to remove the pigments in samples. Choose appropriate sorbent combination with different samples.

Features

- Supply 2 mL or 15 mL purification tubes
- Suitable for AOAC 2007, EN15662 standards, etc

Order Information

EN 15662 Kits

Cat.#	Size	Application	Sorbents	Qty.
COQ002030H	2 mL	General fruits and vegetables	25 mg PSA 150 mg $MgSO_4$	100/Box
COQ015022H	15 mL		150 mg PSA 900 mg $MgSO_4$	50/Box
COQ002032H	2 mL	General fruits and vegetables with fats and waxes	25 mg PSA 25 mg C18 150 mg $MgSO_4$	100/Box
COQ015032H	15 mL		150 mg PSA 150 mg C18 900 mg $MgSO_4$	50/Box
COQ002020H	2 mL	General fruits and vegetables with pigments	25 mg PSA 2.5 mg GCB 150 mg $MgSO_4$	100/Box
COQ015020H	15 mL		150 mg PSA 15 mg GCB 900 mg $MgSO_4$	50/Box
COQ002024H	2 mL	General fruits and vegetables with Highly pigments	25 mg PSA 7.5 mg GCB 150 mg $MgSO_4$	100/Box
COQ015024H	15 mL		150 mg PSA 45 mg GCB 900 mg $MgSO_4$	50/Box

Ceramic Homogenizers

Cat.#	Description	Qty.
009902B	Ceramic Homogenizers, 15 mL	100/Bottle
009901B	Ceramic Homogenizers, 2 mL	200/Bottle

AOAC 2007.01 Kits

Cat.#	Size	Application	Sorbents	Qty.
COQ002031H	2 mL	General fruits and vegetables	50 mg PSA 150 mg $MgSO_4$	100/Box
COQ015031H	15 mL		400 mg PSA 1200 mg $MgSO_4$	50/Box
COQ002033H	2 mL	General fruits and vegetables with fats and waxes	50 mg PSA 50 mg C18 150 mg $MgSO_4$	100/Box
COQ015033H	15 mL		400 mg PSA 400 mg C18 1200 mg $MgSO_4$	50/Box
COQ002036H	2 mL	General fruits and vegetables with pigments	50 mg PSA 50 mg GCB 150 mg $MgSO_4$	100/Box
COQ015036H	15 mL		400 mg PSA 400 mg GCB 1200 mg $MgSO_4$	50/Box
COQ002040H	2 mL	General fruits and vegetables with pigments and fats	50 mg PSA 50 mg C18 50 mg GCB 150 mg $MgSO_4$	100/Box
COQ015040H	15 mL		400 mg PSA 400 mg C18 400 mg GCB 1200 mg $MgSO_4$	50/Box
COQ002025H	2 mL	Others food methods	25 mg C18 150 mg MgSO4	100/Box
COQ015025H	15 mL		150 mg C18 900 mg $MgSO_4$	50/Box
COQ002035H	2 mL	All food types	50 mg PSA 50 mg C18 7.5 mg GCB 150 mg $MgSO_4$	100/Box
COQ015035H	15 mL		400 mg PSA 400 mg C18 45 mg GCB 1200 mg $MgSO_4$	50/Box

QuEChERS Clean-up Pouches

Copure® QuEChERS Clean-up Pouches are used to analyse of multiresidual pesticides. Biocomma uses its automatic powder distribution technology to transfer the sorbent into pouches instead of tube, which is very convenient to match with customer's own 15 mL centrifuge tubes.

Features

- Save 50% of volume, convenient for transportation, saving laboratory space
- Easy-Cut package to open easily without any cutting tooling
- Lower cost, suitable for mass quantity testing

Order Information

Cat.#	Type	Sorbents	Qty.
COQ015031P	AOAC 2007	400 mg PSA 1200 mg $MgSO_4$	100/Box
COQ015033P	AOAC 2007	400 mg PSA 400 mg C18 1200 mg $MgSO_4$	100/Box
COQ015036P	AOAC 2007	400 mg PSA 400 mg GCB 1200 mg $MgSO_4$	100/Box
COQ015040P	AOAC 2007	400 mg PSA 400 mg C18 400 mg GCB 1200 mg $MgSO_4$	100/Box
COQ015025P	AOAC 2007	150 mg C18 900 mg MgSO4	100/Box
COQ015035P	AOAC 2007	400mg PSA 400 mg C18 45 mg GCB 1200 mg $MgSO_4$	100/Box
COQ015022P	EN 15662	150 mg PSA 900 mg $MgSO_4$	100/Box
COQ015032P	EN 15662	150 mg PSA 150 mg C18 900 mg $MgSO_4$	100/Box
COQ015020P	EN 15662	150 mg PSA 15 mg GCB 900 mg $MgSO_4$	100/Box
COQ015024P	EN 15662	150 mg PSA 45 mg GCB 900 mg $MgSO_4$	100/Box

Multifunctional Clean-up Columns

Fast Cleanup with Low Cost

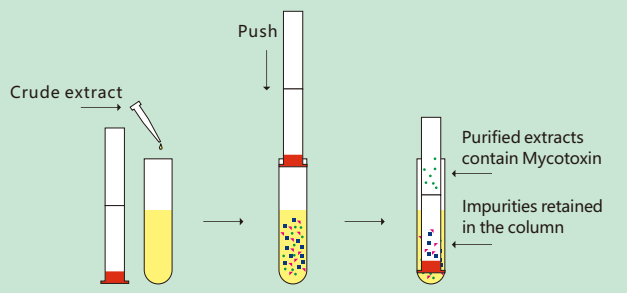
Biocomma Copure® Clean-up Columns are made of multiple absorption matrix, it can quickly and optionally absorb the impurities of lipids, proteins, pigments from sample. but not absorb the desired components and reach the quick purification purpose.

Product Advantages

- Process is quick, purification can be finished within 30 seconds
- Long validity to 24 month under ordinary temperature. High recovery ≥90%, RSD≤5%

Operation Method

Extract the samples, add the extraction solution into test tube, insert the purification cartridge with rubber head into test tube, press it to the bottom of the test tube, the purified liquid flow through sorbent and reach to the top of the purification cartridge, pour out the liquid, then blowing and redissolving in a suitable solvent before test.



Order Information

Cat.#	Product	Application	Qty.
COAF228	Copure® 228 Multifunctional Clean-up Columns	Patulin	25/Box
COAF226	Copure® 226 Multifunctional Clean-up Columns	Aflatoxin B1,B2,G1,G2	25/Box
COAF224	Copure® 224 Multifunctional Clean-up Columns	Zearalenone	25/Box
COAF223	Copure® 223 Multifunctional Clean-up Columns	Aflatoxin M1,M2	25/Box
COAF230	Copure® 230 Multifunctional Clean-up Columns	Deoxynivalenol	25/Box
COAF229	Copure® 229 Multifunctional Clean-up Columns	Ochratoxin A	25/Box

SLE Cartridges for AZO Dye Testing

Determination of banned azo dyes in textile products

Most currently-used dyes and pigments in textile and leather industries are azo dye compounds which under reductive conditions, are decomposed to form fatty or aromatic amines. Those amines derived from azo compounds, some aromatic amines are believed to be carcinogenic or potentially carcinogenic and banned in EU, the U.S. and China.

Biocomma provides SLE cartridges dedicatedly optimized for determining banned azo dyes in textile products, helping you manage product quality quickly and reliably and protect health of your customers.

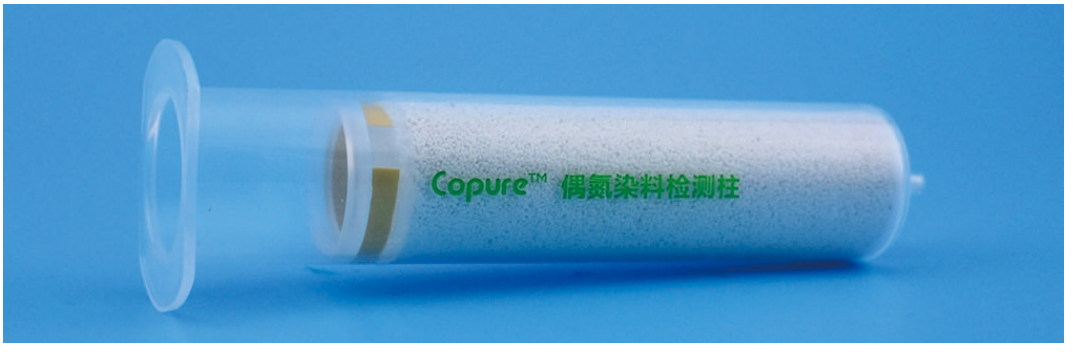
- Packed with dedicatedly optimized diatomaceous earth
- Frits with excellent flowrate control technology
- Complying with China and EU official methods
- Superb performance proven by China's most authoritative textile testing institute

Typical Recoveries

Analyte	Recovery(%)
2,4-diaminoanisole	>20
o-toluidine	>50
2,4-diaminotoluene	>50
other aromatic amines	>70

Related Methods

- GB/T 17592-2011 Textiles - Determination of the banned azo colourants
- EN 14362-1:2017 Textiles - Methods for determination of certain aromatic amines derived from azo colorants



Order Information

Cat.#	Description	Qty.
COAZO060	SLE Cartridges for Azo Dye Testing	4/PK

SPE Cartridges for Pesticide Residue Testing in Tea

Copure® SPE Cartridges meet the standards《GB/T 23204-2008 519 pesticides and related chemical pesticides residue determination in tea by GC-MS》and《GB/T 23205-2008 448 pesticides and related chemical pesticides residue determination in tea by LC-MSMS》, having good performance for pigment, tea polyphenol, organic acid etc in tea.

Order Information

Cat.#	Format	Qty.
COTPT6	6 mL	30/Box
COTPT12	12 mL	20/Box

Cartridges for Ion chromatography pretreatment

In ion chromatography, organic, metal and other interfering ions may affect the analysis of target compounds. The pretreatment columns are based on the principle of reversed phase adsorption or ion exchange, can effectively remove interferences and ensure the accuracy of the results.

Order Information

Cat.#	Description	Format	Qty.
COICC1801	C18 catridge	300mg	50/Box
COICRP01	RP catridge	1mL	50/Box
COICH01	H catridge	1mL	50/Box
COICAG01	Ag catridge	1mL	50/Box
COICNA01	Na catridge	1mL	50/Box
COICAGH01	Ag/H catridge	1mL	50/Box
COICAGNA01	Ag/Na catridge	1mL	50/Box

Destaining Cartridges for Chrome (VI) Testing

Chrome (VI) in leather articles are converted from Chrome (III) in the process of leather production. The toxic substance has been banned by China and EU. To determine Chrome (VI), pigments in leather should be removed firstly.

Destaining cartridges for Chrome (VI) testing are dedicatedly optimized, capable of helping you remove pigments in leather samples and protect consumers.

Optimized for destaining leather samples
Improved recovery and repeatability
Complying with official methods

Applications

- Determination of Chrome (VI) in leather.

Related Methods

- ISO 17075:2007 Leather -- Chemical tests -- Determination of chromium(VI) content
- GB/T 22807-2008 Leather and fur—Chemical tests—Determination of chromium VI content

Order Information

Cat.#	Format	Qty.
COCR3500	500mg/3mL	50/Box
COCR6500	500mg/6mL	30/Box
COCR121000	1000mg/12mL	20/Box

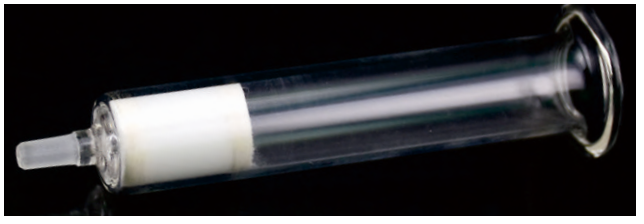
Cartridges for Plasticizer Testing

Determination of phthalate esters

Plasticizers currently used in plastic and packaging food contact materials and their products are mostly phthalate esters (PAEs), some of which are carcinogenic and reproductively toxic. As toxic PAEs leached into food cause health risks for human beings, their use is strictly limited in EU, the U.S., China, Japan, etc.

Biocomma's cartridges for plasticizer testing are made of glass tubes and PTFE frits that prevent impurities from being introduced into the sample. Dedicatedly optimized PSA sorbent also enables thorough cleanup and satisfactory recoveries for official methods.

Chemically inert glass tubes
High purity PTFE frits
Satisfactory recoveries for official methods



Applications

- Determination of phthalate esters in foods

Related Methods

- SN/T 3147-2012 Determination of phthalate esters in foods for export

Order Information

Cat.#	Format	Qty.
COPAE655	500mg/500mg/6mL	30/Box

Polyamide(PA) SPE Cartridges

For Testing Artificial Color in Extraction Samples

PA is a macromolecule substance polymerized by Amide monomer(hexanolactam, adipamide, Oxalic acid), its amido linkage is easily to bring Hydrogen bond with other Polar bond groups, this enables to remove interferents such as artificial color from samples, this is used for testing artificial color.

PA SPE cartridges are filled with special optimized PA sorbent which enables its good decoloring and high recovery.

Specifications

Particle Size: 100-200 mesh

Related Methods

- GB 5009.35-2016 Determination of synthetic colorants in foods
- EN ISO17075-2007 Leather-Chemical tests–Determination of chromium(VI) content

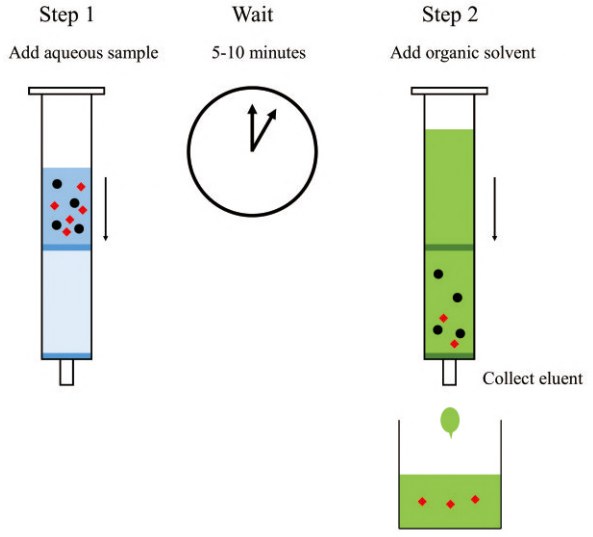
Order Information

Cat.#	Format	Qty.
COPACR36	500mg/3mL	50/Box
COPACR66	500mg/6mL	30/Box
COPACR61	1000mg/6mL	30/Box
COPACR122	2000mg/12mL	20/Box

SLE Supported Liquid Extraction

Novel methodology for liquid-liquid extraction

Supported Liquid Extraction (SLE) is a very efficient and economical sample preparation methodology. Extracting analytes from aqueous samples is achieved with a simple two-step protocol, i.e., loading and elution.



In SLE, porous diatomaceous earth with high surface area and low chemical activity is packed as stationary support for liquid-liquid partition. While loading a sample, the aqueous sample solution passes through diatomaceous earth beads, allowed to adsorb via capillary action, forming a thin membrane. Then, a small volume of organic solvent percolates and produces an aqueous-organic extaction. Because the mass transfer occurs in extreme short paths, analytes can partition very efficiently between the two phases.

Applications

SLE is widely used in food safety, environmental protection, clinical diagnosis, forensic science and material inspection, for example:

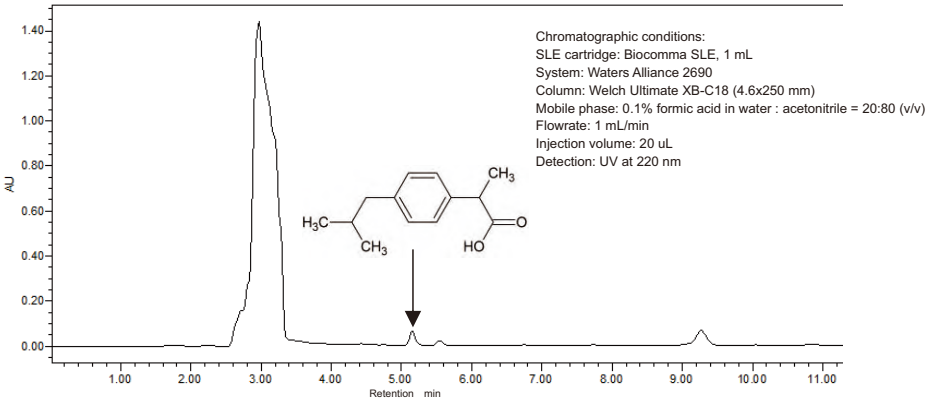
- Analysis of drugs and drug metabolites in biological fluids, such as antidepressant sertraline and anti-inflammatory drug ibuprofen
- Determination of parabens in cosmetics, pharmaceuticals and foodstuffs.

- High recoveries, more reproducible
- Simplified protocols, less time-cosuming
- No need to vigorous shaking, no emulsion formation
- Using less amount of organic solvents, reducing cost and enviromental friendly
- Easy to automation and parallel manipulation

Order Information

Cat.#	Format	Qty.
COSLE1CC	SLE Cartridges, 1 mL	100/Box
COSLE3CC	SLE Cartridges, 3 mL	50/Box
COSLE6CC	SLE Cartridges, 6 mL	30/Box
COSLE12CC	SLE Cartridges, 12 mL	20/Box

Example: extracting ibuprofen in human serum using Biocomma SLE



Results show that recoveries greater than 79.7% are achieved in extracting ibuprofen from human serum by using Bicomma SLE (1 mL).

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