UNIFIED SEPARATION TECHNOLOGIES

FOR BETTER SEPARATION

Unified Separation Technologies (UST)
Address: 4023 Kennett Pike PMR215 Wilmington, DE 19807-2018 USA
Email: info@unifiedseparation.com

UNIFIED SEPARATION TECHNOLOGIES

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FOR BETTER SEPARATION

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ABOUT UST

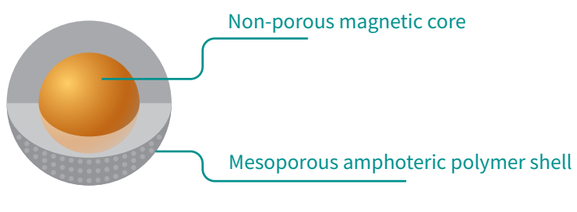
Unified Separation Technologies (UST) is at the forefront of chromatography innovation, offering a comprehensive range of advanced solutions. Our high-quality spherical silica gel, featuring a narrow pore size distribution, is optimized for reliable chromatographic performance. Using proprietary unsymmetrical bonding technology, UST develops unique stationary phases that enhance separation efficiency. Our product portfolio includes Flash and preparative HPLC columns packed with premium materials, specialized magnetic solid-phase extraction (mSPE) products, and automated systems that streamline the mSPE process. These solutions are tailored for pharmaceutical and biopharmaceutical separation and purification, optimizing downstream processes for greater precision, efficiency, and cost-effectiveness.

With over 30 years of experience in silica chemistry and separation technologies, our founding team brings deep industry expertise. We are dedicated to delivering innovative solutions that enhance separation and purification processes in biomanufacturing. Our products are available in North America, Europe, and Asia, supporting separation and purification processes in biomanufacturing operations worldwide.

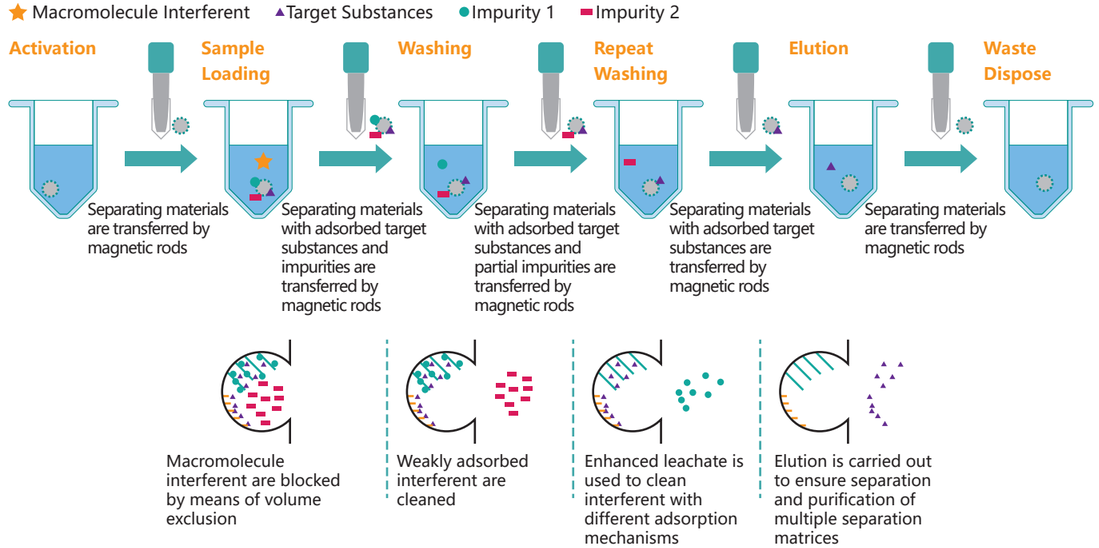
Magnetic Solid Phase Microextraction (m-SPE) Consumables and Instruments

UST proprietary magnetic material integrates the automation-friendly benefits of magnetic extractants with the high capacity and size-exclusion properties of mesoporous shell-layer structures.

It preserves essential SPE characteristics—pore size, surface area, and pore volume—while enabling direct extraction of organic compounds from liquid samples under an external magnetic field. This innovation addresses key limitations of traditional SPE columns, such as poor reproducibility and clogging, offering a robust solution for high-throughput purification of complex biological samples.



Novel m-SPE Extraction Workflow



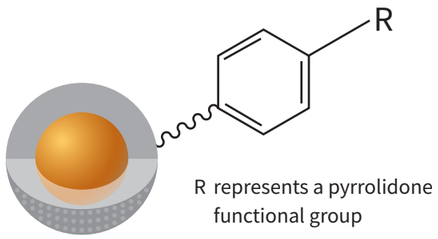
STEP-1	STEP-2	STEP-3	STEP-4	STEP-5
The magnetic rod is agitated up and down in the activation tube to perform the activation of the separating materials and adsorb the separating materials.	The magnetic rod carrying the separating materials is transferred to the sample tube, after which it is agitated up and down to mix the separating materials and samples, and to adsorb the target substances and partial impurities.	The magnetic rod carrying the separating materials with the adsorbed target substances and partial impurities is transferred to the Washing tube, where it is agitated up and down to perform the Washing process and clean up any impurities	The rod is then moved to the eluent tube and agitated again to perform the elution process and clean up the target substances.	The residual separating materials are then adsorbed using the magnetic rod and transferred into the waste hole, after which the extraction process is complete.

/m-SPE Materials/

Bonnacats-MA m-SPE

Bonnacats-MA m-SPE Series
The Bonnacats-MA m-SPE series includes products such as HLB, WCX Plus, WAX, MCX, MAX, and PS. These materials are composed of magnetic microspheres coated with polymeric admaterials and functionalized with specific chemical groups, allowing for the direct extraction and purification of trace-level analytes from complex sample matrices. Bonnacats-MA series features: large surface area, high adsorption capacity, broad pH stability range, simple operation, high extraction efficiency and excellent purification performance

Bonnacats-MA HLB



R represents a pyrrolidone functional group

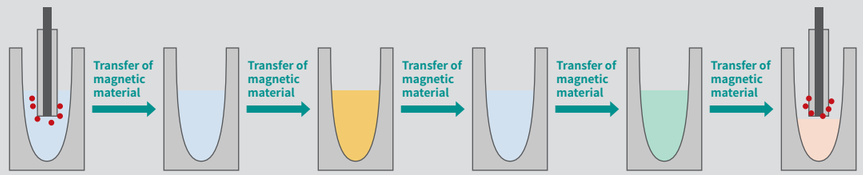
Product Introduction

Bonnacats-MA HLB is a hydrophilic-lipophilic balanced (HLB) magnetic material copolymerized from N-vinylpyrrolidone and divinylbenzene, containing both hydrophilic and hydrophobic groups on its surface. As a versatile admaterial, its unique HLB chemical structure provides excellent retention for weakly to moderately polar analytes. This magnetic material is widely applicable for the enrichment and purification of acidic, alkaline, and neutral compounds.

Order Information

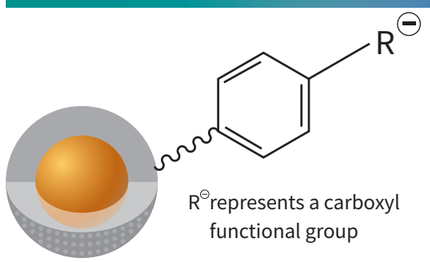
Name of material	Size	Packaging	Item No.
Bonnacats-MA HLB	20-40μm	1g/ pk	UBNMA7300001-0
Magnetic Material		10g/ pk	UBNMA7300010-0

Reference Method



Experiment steps:	Activation	Equilibration	Sample loading	Weak wash	Strong wash	Elution
Recommended solvent:	Methanol	Water	Water containing 0–30% methanol	Water containing 0–30% methanol	Water containing 30-80% methanol	Methanol

Bonnacats-MA WCX Plus



$R^{\ominus}$ represents a carboxyl functional group

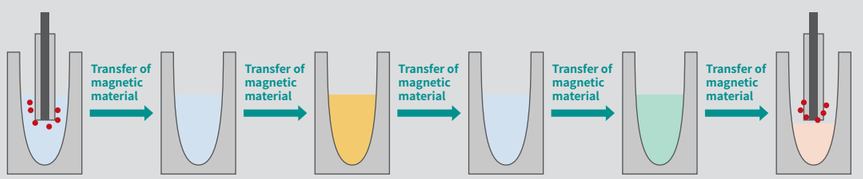
Product Introduction

Bonnacats-MA WCX Plus is a carboxyl-modified, mixed-mode magnetic material that combines weak cation exchange and reversed-phase properties. With its dual retention mechanisms of ion exchange and reversed phase, it offers high selectivity for strongly alkaline compounds. It is applicable for the extraction of strongly alkaline compounds (e.g. catecholamines) from biological samples (e.g. plasma, urine, bile, and tissue homogenates).

Order Information

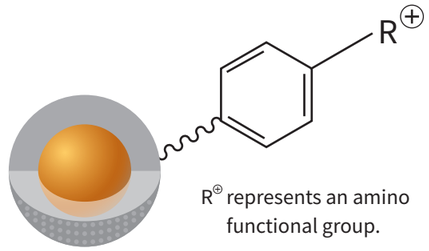
Name of material	Size	Packaging	Item No.
Bonnacats-MA WCX Plus	20-40μm	1g/ pk	UBNMA8300001-0-P
Magnetic Material		10g/ pk	UBNMA8300010-0-P

Reference Method



Experiment steps:	Activation	Equilibration	Sample loading	Weak wash	Strong wash	Elution
Recommended solvent:	Acetonitrile	Water	Weakly alkaline water	Water	Acetonitrile	2% Formic Acid In Acetonitrile

Bonnacats-MA WAX



$R^{\oplus}$ represents an amino functional group.

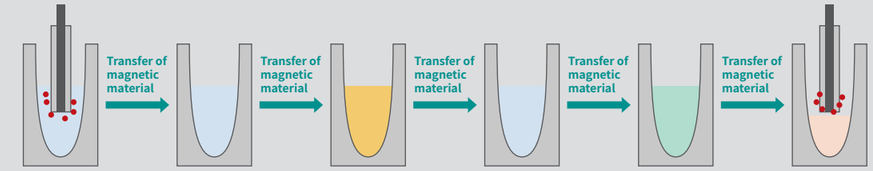
Product Introduction

Bonnacats-MA WAX is a mixed-mode magnetic material combining weak anion-exchange and reversed-phase functionalities, providing high selectivity for strongly acidic compounds. It is well-suited for the extraction of such compounds—including endogenous acidic metabolites like bile acids—from biological matrices such as urine and plasma for analytical applications.

Order Information

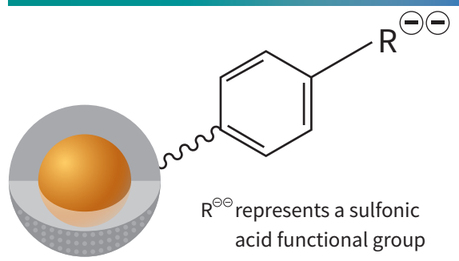
Name of material	Size	Packaging	Item No.
Bonnacats-MA WAX Magnetic Material	20-40μm	1g/ pk	UBNMA14300001-0
		10g/ pk	UBNMA14300010-0

Reference Method



Experiment steps:	Activation	Equilibration	Sample loading	Weak wash	Strong wash	Elution
Recommended solvent:	Methanol	Water	Weakly acidic water	Water	Methanol	2% Ammonia In Methanol

Bonnacats-MA MCX



$R^{\ominus\ominus}$ represents a sulfonic acid functional group

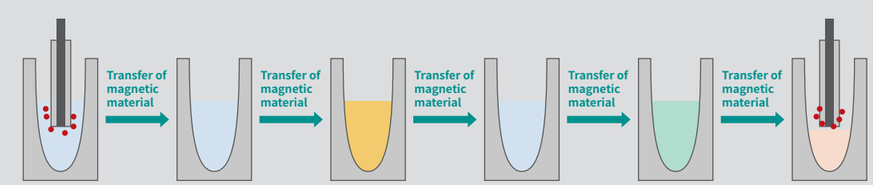
Product Introduction

Bonnacats-MA MCX is a sulfonic acid-modified, mixed-mode magnetic material that combines strong cation exchange and reversed-phase properties and demonstrates high selectivity for alkaline compounds. It is applicable for the extraction of weakly alkaline compounds, such as alkaline drugs (e.g. antidepressants, analgesics) from biological samples like plasma and urine for detection.

Order Information

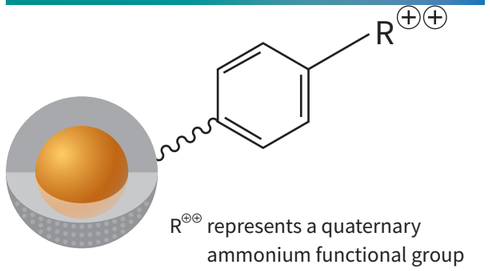
Name of material	Size	Packaging	Item No.
Bonnacats-MA MCX	20-40μm	1g/ pk	UBNMA3300001-0
Magnetic Material		10g/ pk	UBNMA3300010-0

Reference Method



Experiment steps:	Activation	Equilibration	Sample loading	Weak wash	Strong wash	Elution
Recommended solvent:	Methanol	0.1% Formic acid	Weakly acidic water	Water	Methanol	2% Ammonia In Methanol

Bonnacats-MA MAX



$R^{\oplus\oplus}$ represents a quaternary ammonium functional group

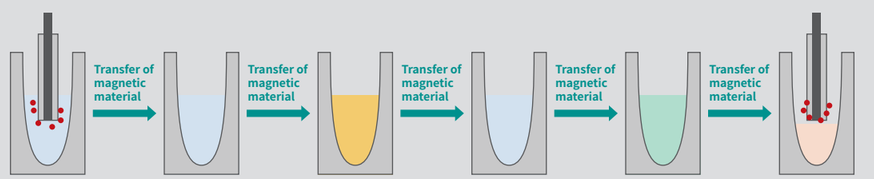
Product Introduction

Bonnacats-MA MAX is a quaternary ammonium-modified, mixed-mode magnetic material that integrates strong anion exchange and reversed-phase properties and exhibits high selectivity for acidic compounds. It is applicable for the extraction of weakly acidic compounds from biological samples (e.g. plasma, urine) for drug metabolism analysis.

Order Information

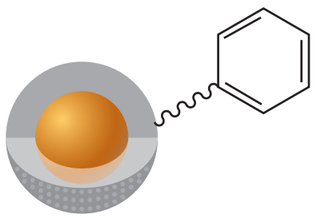
Name of material	Size	Packaging	Item No.
Bonnacats-MA MAX Magnetic Material	20-40μm	1g/ pk	UBNMA13300001-0
		10g/ pk	UBNMA13300010-0

Reference Method



Experiment steps:	Activation	Equilibration	Sample loading	Weak wash	Strong wash	Elution
Recommended solvent:	Acetonitrile	Water	Weakly alkaline water	Water	Acetonitrile	2% Formic Acid In Acetonitrile

Bonnacats-MA PS



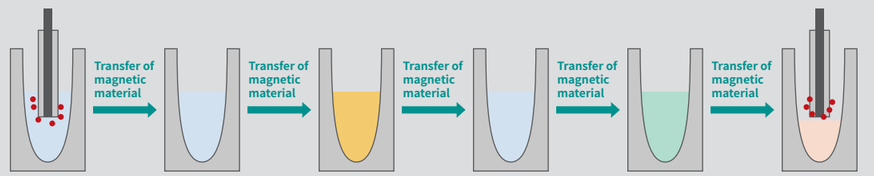
Product Introduction

Bonnacats-MA PS is a neutral polystyrene/divinylbenzene reversed-phase magnetic material with high selectivity for compounds containing benzene ring structures. It is applicable for the extraction of aromatic compounds (e.g. phenol, benzopyrene) from solution samples.

Order Information

Name of material	Size	Packaging	Item No.
Bonnacats-MA PS Magnetic Material	20-40μm	1g/ pk	UBNMA12300001-0
		10g/ pk	UBNMA12300010-0

Reference Method

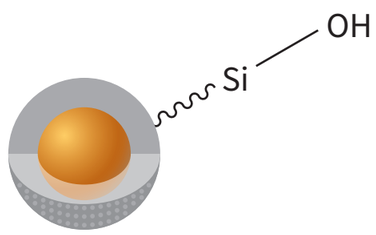


Experiment steps:	Activation	Equilibration	Sample loading	Weak wash	Strong wash	Elution
Recommended solvent:	Methanol	Water	Water containing 0–30% methanol	Water containing 0–30% methanol	Water containing 30-80% methanol	Methanol

Bonnacats-MS m-SPE

The Bonnacats-MS m-SPE includes Silica and RAM C18, materials. These materials are based on high-purity silica and enable direct extraction and purification of trace-level analytes from complex sample matrices under an external magnetic field. The series offers simple operation, high extraction efficiency, and robust performance.
UST also provides custom silica-based MSPE solutions tailored to specific application needs, including normal-phase, reversed-phase, and ion-exchange functionalities.

Bonnacats-MS Silica



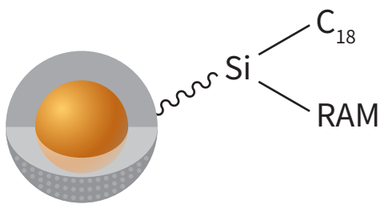
Product Introduction

Bonnacats-MS Silica has a surface rich in active silanol groups, allowing it to extract polar compounds from non-polar solvents through hydrogen bonding interactions. It is suitable for the extraction of polar compounds such as aldehydes, amines, pharmaceuticals, dyes, herbicides, pesticides, organic acids, phenols, and more.

Order Information

Name of material	Size	Packaging	Item No.
Bonnacats-MS Silica Magnetic Material	20-40μm	1g/ pk	UBNMS2300001-0
		10g/ pk	UBNMS2300010-0

Bonnacats-MS RAM C18



Product Introduction

Bonnacats-MS RAM C18 features not only C18 functional groups but also hydrophilic surface modifications on the magnetic material, which act as a size-exclusion barrier to prevent large molecules such as proteins from accessing the material surface—thus avoiding reduced recovery due to clogging. Large biomolecules cannot enter the pores of the magnetic material or interact with its polar surface groups, resulting in no retention. In contrast, small target analytes can enter the pores and are retained by the reversed-phase (C18) groups.

Order Information

Name of material	Size	Packaging	Item No.
Bonnacats-MS RAM C18 Magnetic Material	20-40μm	1g/ pk	UBNMS1300001-0
		10g/ pk	UBNMS1300010-0

/m-SPE Automated/

UST proprietary magnetic materials, integrated with a fully automated m-SPE system, streamline mass spectrometry sample preparation by reducing manual steps, time, and reagent use. This advanced platform offers high throughput, easy operation, and excellent reproducibility, supporting the industry's shift toward automation, standardization, and efficiency.

Auto M32 Automated Sample Preparation System

Product Introduction

Auto M32 automated sample preparation system adopts new sample extraction techniques and magnetic separation materials to adsorb separation materials with magnetic rods, enabling full automation of processes of activation, sample loading, washing and elution for sample extraction and purification before LC-MS analysis. It is widely applied in the fields such as the physicochemical safety analysis of food and cosmetic, clinical in vitro small-molecule biomarker research, and forensic toxicology detection.

Product features

- **Easy and efficient operation: prcesses 32 samples simultaneously in just 15 minutes.**
- **No infusion pumps, tubing, or switching valves, minimizing cross-contamination.**
- **Minimizes pipetting and solvent transfer — eco-friendly and sustainable.**
- **Simple operation with zero wait time for method switching.**
- **Reduces manual intervention — saves time, improves recovery, and enhances reproducibility**

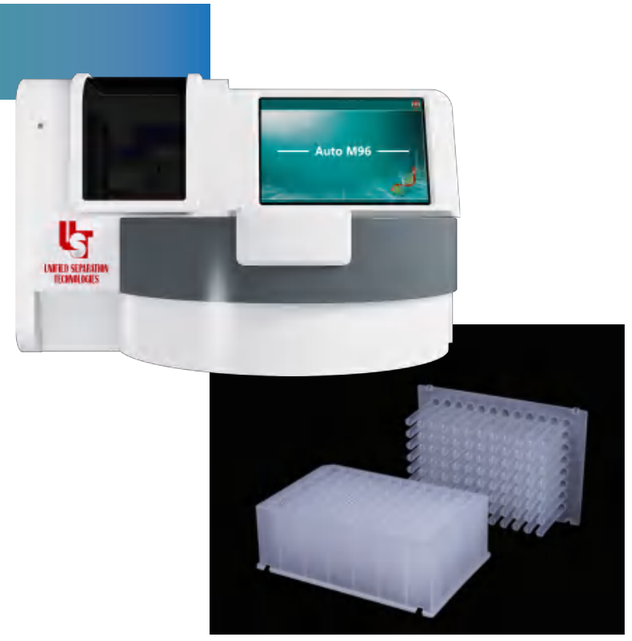
Order Information

Item	Model	Packaging	Item No.
Auto M32 Automated Sample Preparation System	M32	Unit	UM0032
96-well deep well plate, I-shaped	Square-well:24 plates/pack	Pack	UW-AG-0182
8-channel magnetic rod sleeve	50 pieces/pack	Pack	UW-AG-0183

Auto M96 Automated Sample Preparation System

Product Introduction

Auto M96 is a fully automated system for magnetic solid-phase microextraction, designed for high-throughput, fast, and user-friendly sample preparation. Using disposable magnetic rod sleeves and standard 96-well plates, it can process anywhere from 1 to 96 samples in parallel.
Powered by UST proprietary magnetic materials, the system automates critical steps—including material activation, sample loading, washing, and elution—via magnetic rod manipulation. This enables fully hands-free extraction and purification of samples prior to chromatographic or mass spectrometric analysis.



Product features

- **Higher throughput and shorter processing time: Process 96 samples simultaneously in just 15 minutes.**
- **User-friendly operation: Equipped with an intuitive touchscreen interface for easy setup.**
- **Vibration-free design ensures stable operation.**
- **Premium consumables ensure low material loss and high analyte recovery.**
- **Flexible configurations: Customizable solutions tailored to your needs.**

Order Information

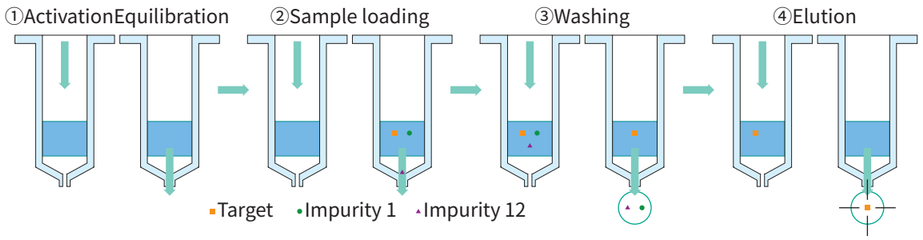
Item	Model	Packaging	Item No.
Auto M96 Automated Sample Preparation System	M96	Unit	UM0096-A
Deep-well 96-well plate	3 plates/pack	Pack	UW-AG-0197
96-well magnetic rod sleeve	2 pieces/pack	Pack	UW-AG-0198

Solid Phase Extraction (SPE) Consumables and Instruments

/SPE Materials/

As the pivotal component in solid phase extraction technique, the solid phase extraction packing materials are widely applied in environmental analysis, food testing, pharmaceutical analysis, etc. UST has developed and manufactured a comprehensive range of extraction materials, including polymer-based, silica--based, and inorganic material-based matrices.
The polymer-based solid phase extraction materials are modified by introducing various functional groups onto a polystyrene-divinylbenzene polymer matrix, offering excellent chemical stability and mechanical strength, wider pH tolerance (stable in pH 1–14) compared to silica gel-based materials. They include Bonnacats series HLB/WCX/WAX/MAX/MCX materials. The silica gel-based solid phase extraction materials are modified by bonding different functional groups to a silica gel matrix. They include Bonnacats series C18 (end-capped)/C18-N (non-end-capped)/C8 materials;

Workflow of Solid phase extraction Materials



Activation: Enable effective interaction between the admaterial and target compounds.
Equilibration: Establishes optimal conditions for effective sample loading and adsorption.
Sample loading: Apply the sample at an appropriate flow rate to enhance analyte retention on the stationary phase.
Washing: Wash the stationary phase with a suitable solvent. Remove impurities with weaker binding affinity to the admaterial compared to the target compounds.
Elution: Disrupts interactions between the analyte and material to selectively release and collect the target compound.

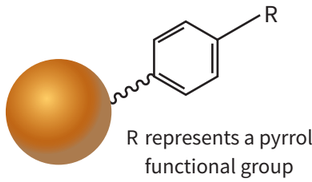
Order Information

Type of matrix	Name of material	Size	Packaging	Item No.
Polymer	Bonnacats HLB packing material	40-60μm	1kg	UB-HL1000
Polymer	Bonnacats WCX packing material	40-60μm	1kg	UB-WC1000
Polymer	Bonnacats WAX packing material	40-60μm	1kg	UB-WA1000
Polymer	Bonnacats MAX packing material	40-60μm	1kg	UB-AX1000
Polymer	Bonnacats MCX packing material	40-60μm	1kg	UB-CX1000
Silica gel	Bonnacats C18 (end-capped) packing material	40-60μm	1kg	UB-C181000
Silica gel	Bonnacats C18-N (non-end-capped) packing material	40-60μm	1kg	UB-C181000-N
Silica gel	Bonnacats NH_2 packing material	40-60μm	1kg	UB-NH1000
Silica gel	Bonnacats PSA packing material	40-60μm	1kg	UB-PA1000
Carbon material	Bonnacats GCB packing material	40-60μm	1kg	UB-GC1000

★Note: Custom surface modifications are available upon request to meet specific user requirements.

Bonnacats SPE Material

Bonnacats HLB

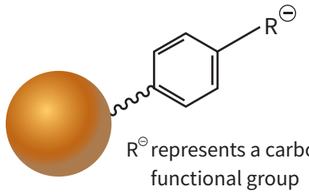


R represents a pyrrolidone functional group

Product Introduction

Bonnacats HLB is an HLB water-wettable, reverse-phase, solid phase extraction material with a polymer matrix, featuring both hydrophilic and hydrophobic groups on its surface. It is applicable to a broad range of acidic, alkaline, and neutral analytes.

Bonnacats WCX

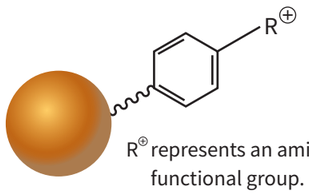


$R^{\ominus}$ represents a carboxyl functional group

Product Introduction

Bonnacats WCX is a polymer-based mixed-mode weak cation-exchange reversed-phase material. It offers high selectivity for strongly basic compounds and is suitable for extracting basic analytes from biological matrices such as plasma, urine, bile, and tissue homogenates.

Bonnacats WAX

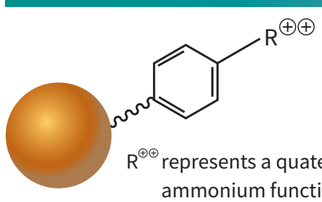


$R^{\oplus}$ represents an amino functional group.

Product Introduction

Bonnacats WAX is a polymer-based mixed-mode material with weak anion-exchange and reversed-phase functionalities. It is stable across a wide pH range and is suitable for extracting acidic compounds and their metabolites from biological matrices.

Bonnacats MAX

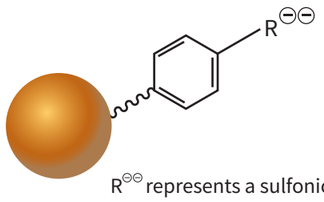


$R^{\oplus\oplus}$ represents a quaternary ammonium functional group

Product Introduction

Bonnacats MAX is a polymer-based mixed-mode strong anion-exchange reversed-phase material. It offers high selectivity for acidic compounds.

Bonnacats MCX

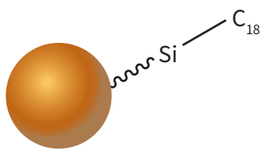


$R^{\ominus\ominus}$ represents a sulfonic acid functional group.

Product Introduction

Bonnacats MCX is a polymer-based mixed-mode Solid Phase Extraction (SPE) material that combines strong cation exchange and reversed-phase properties. It exhibits high selectivity for alkali compounds.

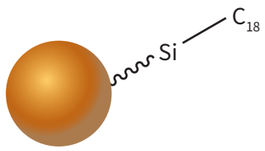
Bonnacats C18 (end-capped)



Product Introduction

Bonnacats C18 (end-capped) is a widely used silica-based reversed-phase SPE material, primarily utilized for extracting non-polar compounds.

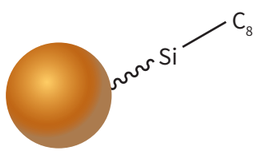
Bonnacats C18-N (non-end-capped)



Product Introduction

Bonnacats C18-N is made from high-purity spherical silica gel and functionalized with C18 groups without end-capping. Compared to end-capped materials, it offers enhanced retention of basic compounds. It is a commonly used silica-based reversed-phase SPE material for extracting non-polar compounds.

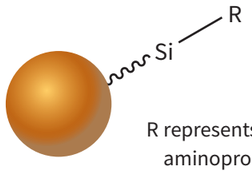
Bonnacats C8



Product Introduction

Bonnacats C8 is a silica gel packing material that mainly relies on interactions with non-polar carbon chains. However, due to its shorter carbon chain length relative to C18, it offers weaker retention for non-polar compounds. It is particularly well-suited for compounds that are too strongly retained on C18 and challenging to elute.

Bonnacats NH_2

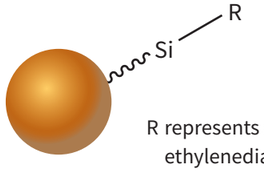


R represents an aminopropyl group

Product Introduction

Bonnacats NH2 is a silica-based material that combines anion exchange and polar interaction functionalities. It can retain compounds through weak anion exchange in aqueous solutions or via polar adsorption in non-polar organic solutions.

Bonnacats PSA



R represents a propyl ethylenediamine group

Product Introduction

Bonnacats PSA is silica-based and exhibits weak anion exchange and normal-phase retention properties. It boasts a stronger ion exchange capacity than Bonnacats NH2.

Bonnacats GCB

Product Introduction

Bonnacats GCB features a highly graphitized carbon structure, with carbon atoms arranged in layers resembling graphite sheets. This structure grants it high stability and strong adsorption capacity, maintaining performance across a broad pH range. It is widely used in pesticide residue analysis.

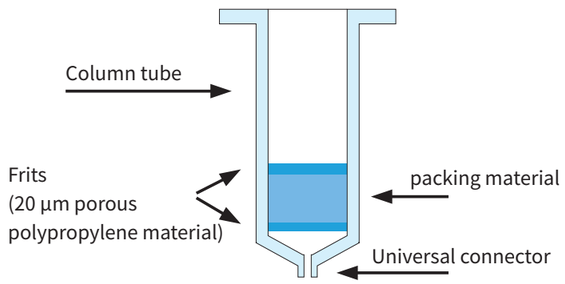
SPE Columns

We offer not only premium materials but also high-performance solid-phase extraction (SPE) cartridges built on the Bonnacats series. Carefully engineered, these cartridges provide excellent adsorption and enrichment capabilities, ensuring precise capture of target analytes and efficient removal of impurities.

SPE columns consist of three main components:

Polypropylene column tube: It offers certain pressure resistance and chemical stability.
Frits: Positioned at both ends of the column tube, they secure the packing material and prevent its leakage. Made of polypropylene, these frits offer excellent permeability and corrosion resistance.
Packing material: As the core component of the SPE column, its type and properties dictate the column's extraction performance.

★Note: For specific types of packing materials, please refer to the preceding text.



Specifications

Specifications and packaging	Packaging	Specifications and packaging	Packaging
30mg/1mL	100columns/pack	150mg/6mL	30columns/pack
60mg/1mL	100columns/pack	200mg/6mL	30columns/pack
60mg/3mL	50columns/pack	500mg/6mL	30columns/pack
100mg/3mL	50columns/pack	1g/6mL	30columns/pack
200mg/3mL	50columns/pack	500mg/12mL	20columns/pack
500mg/3mL	50columns/pack	1g/12mL	20columns/pack

★Note: For specific types of packing materials, please refer to the preceding text.

/Bonnacats 96-well Plate/

Bonnacats 96-well Solid Phase Extraction Plate

UST offers a diverse selection of 96-well plates, featuring various packing materials and specifications tailored to meet a wide range of experimental demands.

Product features

- **High throughput, capable of processing 96 samples simultaneously**
- **Reduced consumption of samples and reagents**
- **Compatible with a wide range of analytical instruments**

Order Information

Bonded phase	Specifications and packaging	Item No.
HLB	10mg/2mL/well;2plates/pack	UHL01020-W
	30mg/2mL/well; 2plates/pack	UHL03020-W
WCX	10mg/2mL/well;2plates/pack	UWC01020-W
	30mg/2mL/well; 2plates/pack	UWC03020-W
WAX	10mg/2mL/well; 2plates/pack	UWA01020-W
	30mg/2mL/well;2plates/pack	UWA03020-W
MCX	10mg/2mL/well; 2plates/pack	UCX01020-W
	30mg/2mL/well;2plates/pack	UCX03020-W
MAX	10mg/2mL/well; 2plates/pack	UAX01020-W
	30mg/2mL/well; 2plates/pack	UAX03020-W

★Note: Other solid-phase extraction materials and SPE plates in various specifications and formats are also available.

Bonnacats 96-well Microplate

UST 96-well microplates incorporate multiple retention mechanisms and deliver reliable reproducibility. They come in a variety of packing materials and specifications to suit different experimental needs. With as little as 2 mg of packing material, these plates are ideal for the pre-treatment of extremely small-volume biological samples. The elution volume can be as low as 25 μL, eliminating the need for nitrogen blowing and reconstitution steps, thereby streamlining experimental operations and enhancing convenience.

Product features

- **Minimal elution solvent required**
- **An ideal choice for the extraction and purification of small-volume samples**

Order Information

Bonded phase	Specifications and packaging	Packaging	Item No.
HLB	2mg/1mL/well	2plates/pack	UHL00210-MW
WCX	2mg/1mL/well	2plates/pack	UWC00210-MW
WAX	2mg/1mL/well	2plates/pack	UWA00210-MW
MCX	2mg/1mL/well	2plates/pack	UCX00210-MW
MAX	2mg/1mL/well	2plates/pack	UAX00210-MW

★Note: Microplates in other specifications are also available upon request.

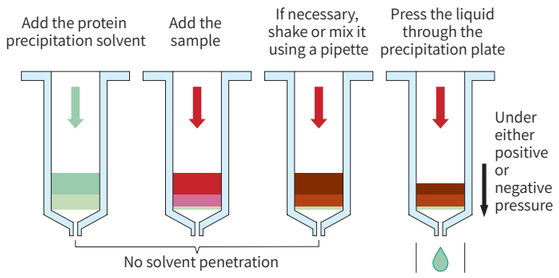
Bonnacats 96-well Protein Precipitation Plate

Protein precipitation is a simple, universal, and efficient method for pretreating blood samples. It typically involves mixing a defined volume of blood with an organic solvent such as methanol or acetonitrile to precipitate proteins and simultaneously extract the target analytes.

Product features

- **Features a unique design that prevents solventpenetration, ensuring the precipitation reagent remains effective for hours;**
- **Compatible with both positive and negative pressure setups;**
- **Enables parallel processing of 96 samples; compatible with the Airplate P96 positive pressure SPE system and Airplate N96 nitrogen evaporator.**

Usage



Order Information

Product name	Specifications and packaging	Item No.
96-well Protein Precipitation Plate, 1 ml/well	Round-well type: 2 plates/pack	UPPP0251001
96-well Protein Precipitation Plate, 2 ml/well	Square-well type: 2 plates/pack	UPPP0252002

Bonnacats 96-well Supported Liquid Extraction Plate

The 96-well Supported Liquid Extraction (SLE) plate is packed with specially processed diatomaceous earth that offers maximum surface area and minimal surface activity. It provides an ideal support for liquid–liquid partitioning and serves as an effective alternative to most traditional liquid–liquid extraction (LLE) methods.

Product features

- **Replace traditional liquid-liquid extraction methods without requiring method revalidation.**
- **No vigorous shaking required during operation, effectively preventing emulsion formation.**
- **Significantly reduces organic solvent usage and improves waste disposal efficiency.**
- **Facilitates easy automation of the extraction process.**

Order Information

Product name	Specifications and packaging	Packaging	Item No.
96-well SLE Plate	400mg/2ml/well	2plates/pack	USL40020
96-well SLE Plate	200mg/2ml/well	2plates/pack	USL20020

Bonnacats 96-well Phospholipid Removal Plate

UST Phospholipid Removal Plate effectively eliminates phospholipids from samples. Its hydrophobic filter plate blocks denatured proteins from aqueous plasma, while the material selectively adsorbs impurities without retaining drugs. The plate is also compatible with automated extraction systems, improving overall workflow efficiency.

Product features

- **Enhances the removal of both proteins and phospholipids**
- **Simple and user-friendly workflow — enhances throughput.**

Operation workflow

Step 1: Preparation—Activate the plate by adding acetonitrile
Step 2: Add the precipitant
Step 3: Add 10–100 µL of sample, such as plasma
Step 4: Collect the eluate

Order Information

Product name	Specifications and packaging	Packaging	Item No.
Phospholipid Removal Plate	30mg/2ml/well	2plates/pack	UPPRP03020

/Consumables and Instruments for 96-well SPE Plates/

Airplate P96 Positive Pressure Solid Phase Extraction Device

The Airplate P96 Sample Preparation System is a positive-pressure solid-phase extraction (SPE) device designed specifically for drug discovery and bioanalytical laboratories. It is compatible with 96-well SPE plates, SLE plates, protein precipitation plates, and filtration plates from various manufacturers.

Product features

- Uniform pressure across all 96 wells minimizes flow rate variation between wells.
- Provides pressure up to 30 psi, allowing viscous samples to pass smoothly through SPE column
- Dual pressure control to meet varying requirements during sample preparation.
- Unique rack design accommodates collection plates of varying heights. ·
- Easy to operate — requires only a gas source, no power supply needed
- Built-in gas flow meter enables precise flow rate adjustment.

Order Information

Product name	Pressure range	Item No.
Airplate P96 positive pressure solid phase extraction device	Low pressure: 0–15 psi High pressure: 30 psi	UAIRP0096

Airplate N96 Nitrogen Blowing Concentrator

Airplate N96 sample nitrogen blowing concentrator is designed for the rapid and efficient evaporation and concentration of samples in 96-well receiver plates. It blows the surface of the sample with nitrogen directly heated and introduced through the insulated heat transfer tube, which keeps all sample wells evenly heated and ensures high concentration efficiency and consistency. Different from other products using metal module heating, it avoids the damage to unstable compounds caused by partial overheating.

Product features

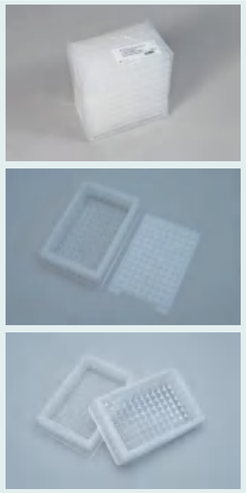
- Allows two 96-well plates to be used together to process 192 samples simultaneously
- Gas supply module with adjustable height allows the use of collection plates of various specifications
- Removable sample concentration module enables easy cleaning of nitrogen blowing needles
- Sample concentration module can be used in fume hood alone

Order Information

Product name	Temperature range	Item No.
Airplate N96 sample nitrogen blowing concentrator	Room temperature to 80°C; flow rate: up to 100 L/min	UAIRN0096

Consumables for 96-well Plates

Order Information

Picture	Product: Bonnacats 96-well collection plate		
	Specifications and packaging	Packaging	Item No.
	Round wells, 1 mL, U-bottom	50plates/pack	UBY96SP1036-U
	Round wells, 2mL, U-bottom	50plates/pack	UBY96SP2036-U
	Round wells, 0.36 mL, U-bottom	100plates/pack	UBY96SP0236-U
	Round wells, 0.36 mL, V-bottom	100plates/pack	UBY96SP0236-V
	Product: Bonnacats 96-well silicone sealing mat		
	Specifications and packaging	Packaging	Item No.
	Round wells, 1 mL	50pieces/pack	UBY96GP2036-M
	Round wells, 2 mL	50pieces/pack	UBY96GP1036-M
	Product: Bonnacats 96-well reservoir plate		
	Specifications and packaging	Packaging	Item No.
	195mL/well	5pieces/pack	UBY96WSP

★Note: Additional 96-well plate consumables in various specifications and formats are also available.

Chromatography Consumables

/Casthull Core-shell Chromatography Column/

Product Introduction

Developed and manufactured by UST, the Casthull 2.7μm core-shell column is fully compatible with standard HPLC systems. With minimal adjustments—such as optimizing tubing and the flow cell—users can achieve fast, high-efficiency separations on existing instruments, significantly improving productivity while avoiding costly equipment upgrades.

Product features

- **Independently developed and manufactured through a meticulous step-by-step process, ensuring full control over performance parameters and a more uniform column bed structure**
- **Incorporates a core-shell structure with a porous surface and a solid internal core, enhancing column efficiency and resolution**
- **Operates at lower column pressure, enabling higher analysis speeds and increased sensitivity**
- **Delivers UHPLC performance on conventional HPLC instruments**

Order Information

Product	Bonded phase	Particle size/Pore size（μm）	Size	Item No.
Casthull	C18 Plus	2.7μm/90Å	2.1x50mm	UCST9020502-0
			2.1x100mm	UCST9021002-0
			3.0x50mm	UCST9020503-0
			3.0x100mm	UCST9021003-0
	Phenyl-Hexyl		2.1x50mm	UCST6020502-0
			2.1x100mm	UCST6021002-0
			3.0x50mm	UCST6020503-0
			3.0x100mm	UCST6021003-0

★Note: Other specifications and types of core-shell columns are also available.

/Bonnasil-BS Chromatography Column/

Product Introduction

The Bonnasil-BS series analytical chromatography columns are packed with packing materials characterized by highly uniform particle sizes, offering high column efficiency, excellent mechanical strength, and resistance to contamination. The unique surface bonding technique significantly enhances separation performance, ensuring hassle-free analytical testing.

Product features

- **High-purity uniform-pore silica gel: shortens analysis time, improves efficiency, and eliminates peak tailing, ensuring precise and reliable results.**
- **High mechanical strength: Enhances pressure resistance, prolongs column lifespan, and ensures stable equipment operation.**
- **High Performance & Cost Efficiency: Delivering reliable results while minimizing expenses to enhance lab productivity**

Order Information

Product series	Bonded phase	Particle size/Pore size	Size	Item No.
Bonnasil-BS	C18 Plus	5μm/120Å	4.6x50mm	UBSP050505-2
			4.6x150mm	UBSP051505-2
			4.6x250mm	UBSP052505-2
	C18 L	5μm/200Å	4.6x50mm	UBS9050505-L
			4.6x150mm	UBS9051505-L
			4.6x250mm	UBS9052505-L
	SB C18	5μm/200Å	4.6x50mm	UBSA050505-L
			4.6x150mm	UBSA051505-L
			4.6x250mm	UBSA052505-L
	AQ C18	5μm/120Å	4.6x50mm	UBSM050505-2
			4.6x150mm	UBSM051505-2
			4.6x250mm	UBSM052505-2
	Phenyl	5μm/120Å	4.6x50mm	UBS6050505-0
			4.6x150mm	UBS6051505-0
			4.6x250mm	UBS6052505-0
	HILIC	5μm/120Å	4.6x50mm	UBSH050505-2
			4.6x150mm	UBSH051505-2
			4.6x250mm	UBSH052505-2
	NH_2	5μm/120Å	4.6x50mm	UBSN050505-2
			4.6x150mm	UBSN051505-2
			4.6x250mm	UBSN052505-2
	SCX（T）	5μm/300Å	4.6x50mm	UBS5050505-LA
			4.6x150mm	UBS5051505-LA
			4.6x250mm	UBS5052505-LA

★Note: Other specifications and types of chromatography columns are also available.

/Bonnasil-CH Chromatography Column/

Product Introduction

Bonnasil-CH analytical columns feature a unique organic-inorganic hybrid bonding technology, offering high separation efficiency and broad pH tolerance—ideal for diverse applications.

Product features

- **Advanced spherization process for more uniform particle size, low backpressure, high column efficiency, and excellent separation performance**
- **Wide pH tolerance, compatible with a broader range of solvents**
- **Unique surface hybridization process for stronger chemical stability and a broader range of mobile phase options**

Order Information

Product series	Bonded phase	Particle size/Pore size	Size	Item No.
Bonnasil-CH	C18	5μm/120Å	4.6x50mm	UCH9050505-2
			4.6x150mm	UCH9051505-2
			4.6x250mm	UCH9052505-2
	C8	5μm/120Å	4.6x50mm	UCH8050505-2
			4.6x150mm	UCH8051505-2
			4.6x250mm	UCH8052505-2
	C4	5μm/300Å	4.6x50mm	UBS4050505-LA
			4.6x150mm	UBS4051505-LA
			4.6x250mm	UBS4052505-LA

★Note: Other specifications and types of chromatography columns are also available.

/Ghost Peak Trap Column/

Product Introduction

In liquid chromatography analysis, ghost peaks can often disrupt the separation or quantification of pharmaceutical compounds. UST Bonnacats-GH Ghost Peak Trap Column, installed after the liquid chromatography mobile phase mixer, effectively removes impurity-induced ghost peaks, saving valuable time and effort for laboratory personnel involved in pharmaceutical analysis.

Product features

- **Effective ghost peak removal, solving interference in liquid chromatography analysis**
- **Simple installation, saving time and costs**

Order Information

Product name	Specification and packaging	Item No.
Bonnacats-GH Ghost Peak Trap Column	4.6x50mm	BNGH0505

★Note: Other specifications and types of ghost peak trap column are also available.

/Guard Cartridge and Cartridge Holder/

Product Introduction

The analysis column guard cartridge serves as the first line of defense, primarily preventing sample impurities from entering the analysis column through adsorption or filtration. The guard cartridge holder mainly functions to secure and protect the guard cartridge, ensuring its stable position during installation and use, and preventing damage from factors such as vibration or movement.

Order Information

Product name	Specifications and packaging	Packaging	Item No.
Non-inline guard cartridge holder	Stainless steel, 4.6 mm	1plates/pack	UCSHZT100
Analysis columns guard cartridge	C18,5μm,4.6*10mm	1piece	UCSH950105

★Note: Additional guard cartridges and cartridge holders available in various specifications.