

# NCI

## Chromatography Product

Manufacturers



- ULTIMASYIL Series Columns
- Hi-Purit SPE Cartridges
- Maxsil Syringe Filters

- NEUROSYL Series Columns
- Hi-Purit Flash Cartridges
- NCI LC/GC Vials

**NATIONAL** CHROMATOGRAPHY  **INCO**

[www.ncin.in](http://www.ncin.in)

Volume: 2017-2

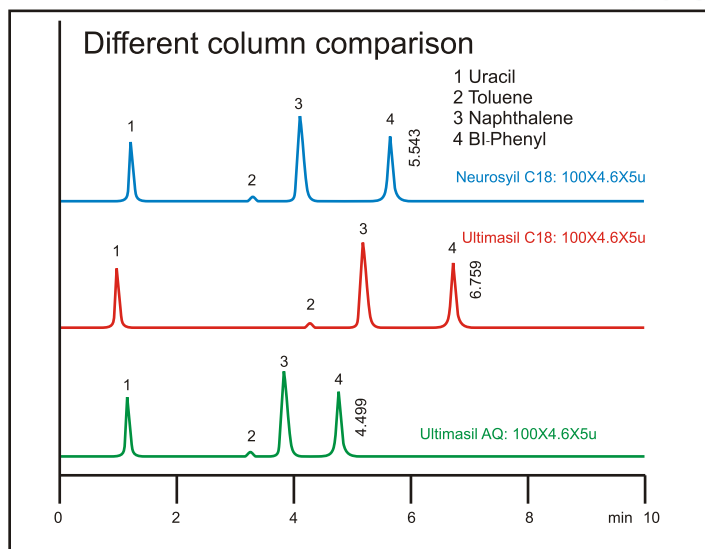
# ULTIMASYIL COLUMNS



## ULTIMASYIL COLUMNS: Analytical Columns

- \*Ultimasil Columns are packed with the Silica gel having very high purity at 99.99% SiO<sub>2</sub>.
  - \*Narrow Particle size distribution is the Hall mark of Ultimasil Columns technical Engineering.
  - \*Particle size is steady to maintain high product reliability.
  - \*Wide pH range of 2-8 helps for long Column life time.
  - \*Silica surface is covered by hydroxyl groups(-OH) called Silanol(Si-OH) to improve wetting in solvent or low polar systems, various chemical treatments are applied to mask this functional group.
- These treatments can also moderate hard settling, mar and burnish resistance & UV performance.

**Ultimasil column Phases :** C18, C8, Phenyl, Cyano, Amino, Silica, AQ(Hydrosphere), Diol are available.



- \* ANALYTICAL HPLC COLUMNS
- \* SFC COLUMNS
- \* GEL MEDIA



# ULTIMASYIL COLUMNS

## Ultimasyil C 18 HPLC Columns :

**USP:** L1    **Particle Size:** Spherical    **Endcapped:** Yes  
**Pore Size:** 80<sup>o</sup>, 100<sup>o</sup>, 120<sup>o</sup>, 200<sup>o</sup>A

**Application:** 100A<sup>o</sup> provides adequate resolution & retention for most application. In general reverse Phase application will require of modifier in the Mobile Phase as compared to 80A<sup>o</sup> Application. \*Wide pH stability for long Column life time and method flexibility. \*\* Ultra high purity Silica used.



## Ultimasyil C 8 HPLC Columns :

**USP:** L7    **Particle Size:** Spherical    **Endcapped:** Yes  
**Pore Size:** 80<sup>o</sup>, 100<sup>o</sup>, 120<sup>o</sup>, 200<sup>o</sup>A

**Application:** 100A<sup>o</sup> appropriate for most applications. Use for acids, bases, neutrals or Chelators. \*Stable Bonding gives our C8 ruggedness for wide pH range less hydrophobic than C18. \*C8 offers the highly degree of hydrophobicity for Pharmaceuticals, Nucleotides \*. Excellent for method development & for an existing method.  
\*\* Ultra high purity Silica used.



## Ultimasyil Phenyl HPLC Columns :

**USP:** L11    **Particle Size:** Spherical    **Endcapped:** Yes  
**Pore Size:** 80<sup>o</sup>, 100<sup>o</sup>, 120<sup>o</sup>, 200<sup>o</sup>A

**Application:** 100A<sup>o</sup> appropriate for most application. Use for peptides, proteins and other biomolecules and for basic compounds. Extremely versatile. Excellent for method development or replacement in an existing method.  
\*\*Ultra high purity Silica used.



## Ultimasyil Cyano HPLC Columns :

**USP:** L10    **Particle Size:** Spherical    **Endcapped:** Yes  
**Pore Size:** 80<sup>o</sup>, 100<sup>o</sup>, 120<sup>o</sup>, 200<sup>o</sup>A

**Application:** 100A<sup>o</sup> appropriate for most applications. Use for acids, bases, neutrals or chelators Extremely versatile. Excellent for method development or replacement in an existing method. \*\*Ultra high purity Silica used.



## Ultimasyil Amino HPLC Columns :

**USP:** L8    **Particle Size:** Spherical    **Endcapped:** Yes  
**Pore Size:** 80<sup>o</sup>, 100<sup>o</sup>, 120<sup>o</sup>, 200<sup>o</sup>A

**Application:** Best for reversed phase applications. Extremely versatile. Excellent for method development or replacement in an existing method.  
\*\*Ultra high purity Silica used.



## Ultimasyil Silica HPLC Columns :

**USP:** L3    **Particle Size:** Spherical    **Endcapped:** Yes  
**Pore Size:** 80<sup>o</sup>, 100<sup>o</sup>, 120<sup>o</sup>, 200<sup>o</sup>A

**Application:** Silica is robust reproducible media for High Quality range of Bonded phase columns \* efficient & selectivity for chromatography of non - polar & moderately polar organic compounds by normal phase \*Separation on silica columns depend upon the difference in orientation, type & number of functional groups associate with the compounds in the samples.  
\*Excellent for method development or replacement in an existing method.



## Ultimasyil C4 HPLC Columns :

**USP:** L26    **Particle Size:** Spherical    **Endcapped:** Yes  
**Pore Size:** 80<sup>o</sup>, 100<sup>o</sup>, 120<sup>o</sup>, 200<sup>o</sup>A

**Application:** Use for acids, bases, neutrals or chelators, peptides, proteins and other biomolecules. Use for acids and neutrals. Extremely versatile. Excellent for method development or replacement in an existing method. \*\* Ultra high purity Silica used.



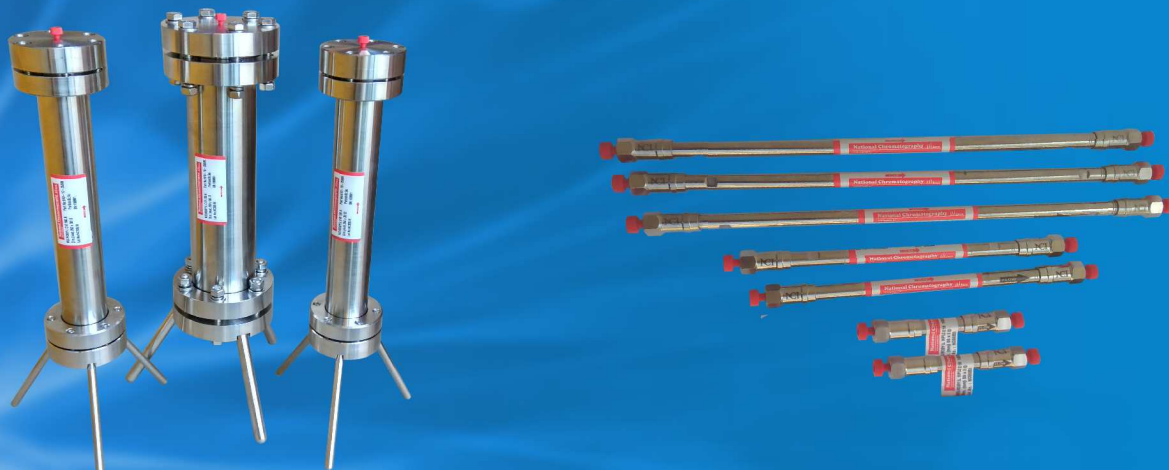
## Ultimasyil Diol HPLC Columns :

**USP:** L20    **Particle Size:** Spherical    **Endcapped:** Yes  
**Pore Size:** 80<sup>o</sup>, 100<sup>o</sup>, 120<sup>o</sup>, 200<sup>o</sup>A

**Application:** Diol can be used to separate proteins by Gel filtration. When operated with an Aqueous buffer, the Diol phase can effectively shield the silica surface from interacting with proteins. A well known use of Diol columns, under Normal Phase conditions, is the separation of steroids & sterols. Excellent for method development or replacement in an existing method.  
\*\* Ultra high purity Silica used.



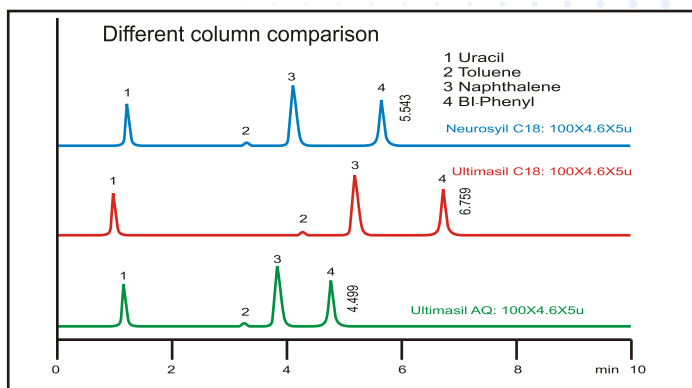
## NEUROSYL COLUMNS



### NEUROSYL: Analytical/Semi Prep Columns

- \*High Carbon loading, high surface Area, Wide pH stability for long Column life time and method flexibility
- \*One of the most rugged and reliable columns available
- \*Silica packed is metal free and is exceptionally stable at high and low pH
- \*Has homogenous silica surface. \*Ultra high purity Silica used.
- \*Excellent for method development or replacement in an existing method

**Neurosyil column Phases:** C18, C8, Phenyl, Cyano, Amino, C4 , **UPLC 1.8 $\mu$**  Phases are available.



- \* UPLC HPLC COLUMNS
- \* ANALYTICAL HPLC COLUMNS
- \* PREPARATIVE HPLC COLUMNS
- \* GEL MEDIA
- \* CHROMATOGRAPHY CONSUMABLES



## NEUROSYL COLUMNS



### NEUROSYL BULK BONDED SILICA

Phases : C18, C8, Phenyl, CN, Amino

Pore size : 100Å<sup>0</sup> / 200Å<sup>0</sup> / 300Å<sup>0</sup>

Microns : 3μ, 5μ, 7μ, 10μ, 20μ

ID (mm): 10, 15, 20, 21.2mm ID, 30, 50, 100mm ID



### NEUROSYL ANALYTICAL COLUMNS

Pore size : 100Å<sup>0</sup> / 120Å<sup>0</sup> / 150Å<sup>0</sup> / 200Å<sup>0</sup>

Microns : 3μ, 5μ, 7μ, 10μ, 20μ

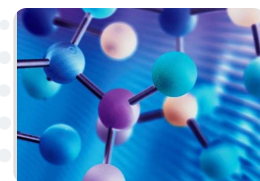


### NEUROSYL SEMI PREP / PREPARATIVE

Pore size : 100Å<sup>0</sup> / 120Å<sup>0</sup> / 150Å<sup>0</sup> / 200Å<sup>0</sup>

Microns : 3μ, 5μ, 7μ, 10μ, 20μ

ID (mm): 10, 15, 20, 21.2mm ID, 30, 50, 100mm ID



### NEUROSYL PEPTIDES AND PROTEINS

Pore size : 100Å<sup>0</sup> / 200Å<sup>0</sup> / 300Å<sup>0</sup>

Microns : 3μ, 5μ, 7μ, 10μ, 20μ

ID (mm): 10, 15, 20, 21.2mm ID, 30, 50, 100mm ID



### NEUROSYL C30 ( CARATENOID HPLC COLUMNS ) 200A\*

\* Separates Carotenoid in blood samples, food products, natural products extracts.

\* C 30 columns are useful for separation of Geometric Isomer,

\* Neurosilyl C 30 stationary phases are bonded with a distribution of long chain hydrocarbons that have an average length of C30

\* Neurosilyl C 30 stationary phases are bonded using a proprietary technique employed at national Chromatography.

\* This material has been found to successfully separate many isomers in the carotenoid family of long chain molecules.



## SOLID PHASE EXTRACTION

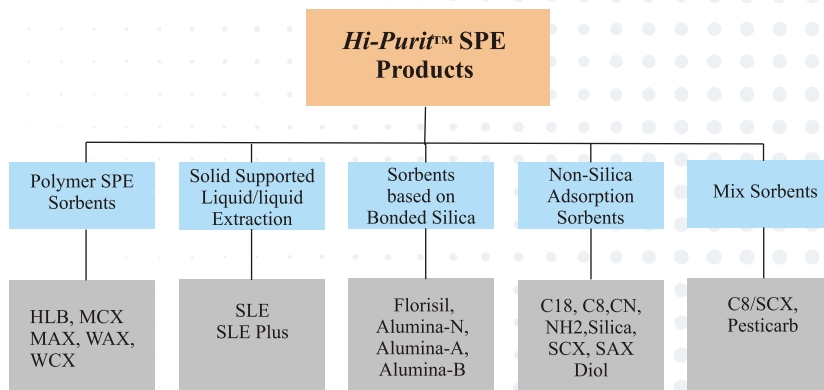
*Hi-purit*<sup>TM</sup> SPE

## Polymeric Solid Phase Extraction

for enhanced purification

Pioneer in Molecularly Imprinted Polymers (MIP) and expert in polymer chemistry, NATIONAL CHROMATOGRAPHY develops, manufactures and markets products for solid phase extraction applications. NATIONAL CHROMATOGRAPHY has developed the last generation of polymeric SPE columns (*Hi-purit*<sup>TM</sup>)

*Hi-purit*<sup>TM</sup> columns are sample preparation products for the extraction of compounds from complex matrices. These cartridges contain sorbents which supports the six common retention mechanisms used in today's analytic



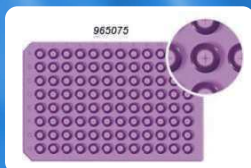
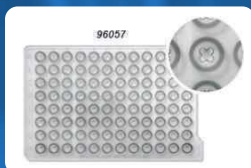
*Hi-purit*<sup>TM</sup> polymeric sorbents have equivalent properties than the polymeric sorbents supplied by other manufacturers. this table gives the correspondents between *Hi-purit*<sup>TM</sup> and main m

National Chromatography	<i>Hi-purit</i> <sup>TM</sup> HLB	<i>Hi-purit</i> <sup>TM</sup> MCX	<i>Hi-purit</i> <sup>TM</sup> WCX	<i>Hi-purit</i> <sup>TM</sup> MAX	<i>Hi-purit</i> <sup>TM</sup> WAX
Waters	Oasis HLB	Oasis MCX	Oasis WCX	Oasis MAX	Oasis WAX
Phenomenex	Strata-X	Strata-X-C	Strata-X-CW	Strata-X-A	Strata-X-AW

NCI

*Hi-purit*<sup>TM</sup> SPE96 - Well Collection plate  
Round & Square Bottom

## 96 - Well Collection mats



*(Hi-purit*<sup>TM</sup> HLB)  
Hydrophilic Lipophilic Balance



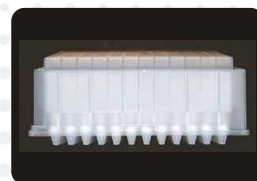
*(Hi-purit*<sup>TM</sup> MAX)  
Mixed-mode RP / Strong Anion Exchange



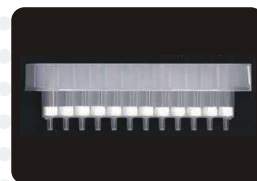
*(Hi-purit*<sup>TM</sup> MCX)  
Mixed-mode RP/ Cation Exchange



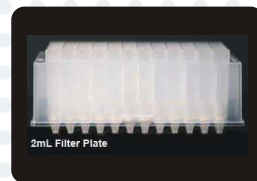
*(Hi-purit*<sup>TM</sup> SCX)  
Strong Cation Exchange



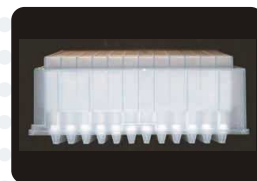
*(Hi-purit*<sup>TM</sup> WCX)  
Weak Cation Exchange



*(Hi-purit*<sup>TM</sup> SAX)  
Strong Anion Exchange

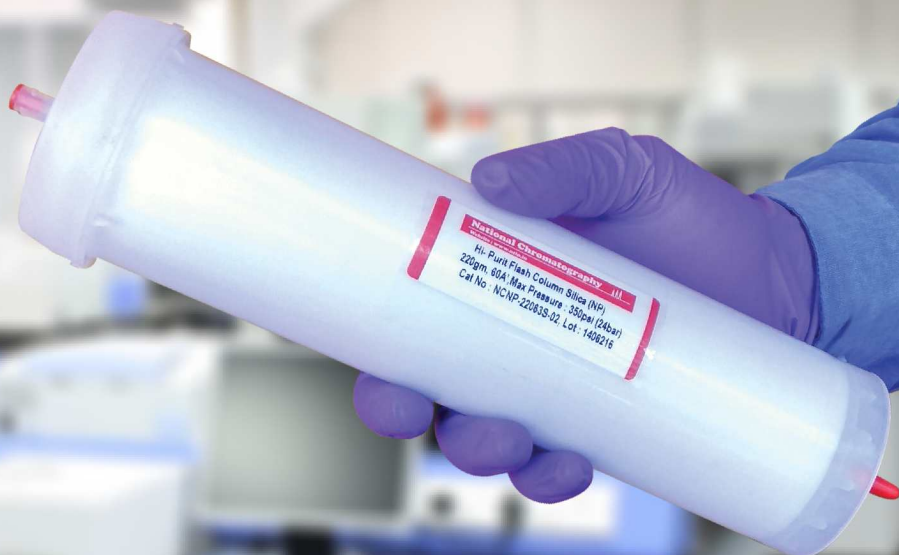


*(Hi-purit*<sup>TM</sup> WAX)  
Weak Anion Exchange





# Hi-purit™ FLASH



## Hi-Purit™ FLASH CHROMATOGRAPHY COLUMN PHASES

Normal  
Phase  
Silica

C-18

Amine

Alumina

Cyano

Diol

SAX

SCX

- \* Ultra High purity,
- \* Spherical Silica
- \* Reliability
- \* Efficiency
- \* Consistency
- \* Highly Reproducible
- \* Rugged & Robust

### Specifications :

Column Type : Single use, disposable  
 SiO<sub>2</sub> : 99.99%  
 pH Value : 6 - 8  
 Specific Surface Area : 450-550m<sup>2</sup>/g  
 Mesh Size : 230-400particle size  
 Particle Size : Classic : 40-63µm  
                           Premium : 40-75µm  
 Pore Volume : 0.65 - 0.85 ml/g  
 Bulk Density : 0.5g/ml

Sample Size(g)	Column Size (g)
4mg - 0.4g	4g
12mg - 1.2g	12g
25mg - 2.5g	25g
40mg - 4.0g	40g
80mg - 8.0g	80g
120mg - 12g	120g
330mg - 33g	330g



# Hi-purit™ FLASH

## Normal Phase Silica

**Hi-Purit™ Normal Phase Flash Columns**, Disposable for Flash Purification of Organic Compounds. With Highest Resolution & reproducibility. Hi-Purit Flash Columns operates under Normal Phase Separation (100% Hexane => 100% Ethyl Acetate) The Normal Phase going from non-polar to increasing polarity.

- \* Reliable, Consistent Performance from Automated precision packing.
- \* Long Shelf life in Air-tight.
- \* High Flow Rate for fast purification of different Compounds
- \* Luer Lock Endfitting compatible to all Organic Purification Instruments.

## C-18 Phase

**Hi-Purit™ C18 Flash Columns**, Disposable for purification of medium to high polarity as well as Ion Compound to save time & money. Hi-Purit™ Rf Reverse Phase C18- reactivated silica flash columns provide reproducible, high-capacity purification.

- \* Long Shelf life in Air-tight.
- \* Luer Lock Endfitting compatible to all Organic Purification Instruments.

## C-8 Phase

**Hi-Purit™ C-8 Flash Columns** can be used for reverse-phase purification of compounds with basic properties. Hi-Purit C-8 have a monolayer of C-8 alkali chain chemically bonded to the silica surface to reduce a reproducible an efficient stationary phase.

## Phenyl Phase

**Hi-Purit™ Phenyl Flash Columns** can be used for reverse-phase purification of compounds with basic properties. Hi-Purit Phenyl shows unique selectivity for the analysis of aromatic & moderately polar compounds

- \* High flow rate for fast resolution of Compounds.
- \* Long shelf life in Airtight. Luer Lock Endfittings, compatible with all Automated Organic Purification Instruments.

## Cyano Phase

**Hi-Purit™ Cyano Flash Columns** are chemically bonded with Cyanopropyl groups. For both Normal -Phase & Reverse -Phase Modes. This makes them versatile purification doing for separation. When used in Normal Phase Condition will perform compatible to normal phase silica gel using similar solvents. In reverse phase condition performance is similar to reverse-phase flash columns, although the elution order may be different.

## Amino Phase

**Hi-Purit™ Amino** can be used in either Normal Phase or Reverse Phase for the Purification of compounds with basic properties. Purification on Amine-functionalised silica eliminates the need to add mobile phase modifier such as TEA as it is often done for Purification on Normal Phase Silica, this reduces the time required to remove solvents from purified fractions.

## Diol Phase

**Hi-Purit™ Diol Flash Columns** are high performance media for difficult separation of low to medium polarity samples. Diol is as widely applicable for Normal Phase separation of Hydrophilic compounds. Hi-Purit™ shows retention behaviour of Normal Phase Chromatography when it is used with low-polarity.

## C-4 Phase

**Hi-Purit™ C-4 Flash Purification Columns** achieves better separation than C18 for some types sample. Hi-Purit™ C-4 stationary Phase surface hydrophobicity is lower than that of C18 & C8. Retention times of samples on C-4 therefore tend to be shorter.

- \* High flow rate for fast resolution of Compounds.
- \* Long shelf life in Airtight. Luer Lock Endfittings, compatible with all Automated Organic Purification Instruments.

## SAX Phase

**HI-PURIT™ SAX** are Strong Anion Exchange (SAX) fully retains Acetic Compounds. Hi-Purit™ SAX Columns can be used clean-up to or to isolate acetic products

## SCX Phase

**Hi-Purit™ SCX Flash Purification Columns** are Strong Cation Exchange silica gel fully retains basic compounds. Hi-Purit™ SCX Flash Columns can be used as a clean-up to or isolate basic compounds.

- \* High flow rate for fast resolution of Compounds.
- \* Long shelf life in Airtight. Luer Lock Endfittings, compatible with all Automated Organic Purification Instruments.



National Chromatography is providing complete solution for all the laboratory vials and accessories users by manufacturing, engineering with In-house manufacturing and packing facility are with class clean room.

All glass ware are Type 1 Borosilicate glass, 3.3 expansion are used to manufacture all vials



Autosampler Vials,  
8mm Screw Neck for Shimadzu HPLC

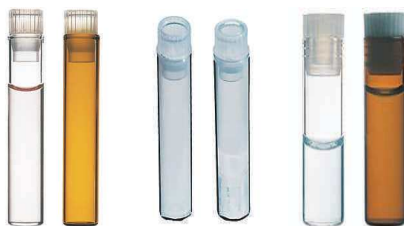


Autosampler Vials, 9mm  
Screw Neck for Agilent & Waters HPLC

CLOSURES



INSERTS



SHELL VIALS





# VIALS



CRIMP TOP GLASS VIALS

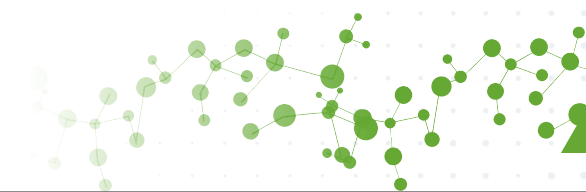


SNAP – TOP VIALS



## GC Headspace Vials

National Chromatography Inco, Headspace Vials - Manufactured from Type 1 Borosilicate glass - Available in 6ml, 9ml, 10ml, 12ml, 20ml and 27ml - Clear or Amber - Finishes available in 20mm standard crimp seal or beveled finish and 18mm screw thread - Radius (Rounded) bottom or flat bottom styles



*We Provide Packaging for Excellence*



## Glass Vials



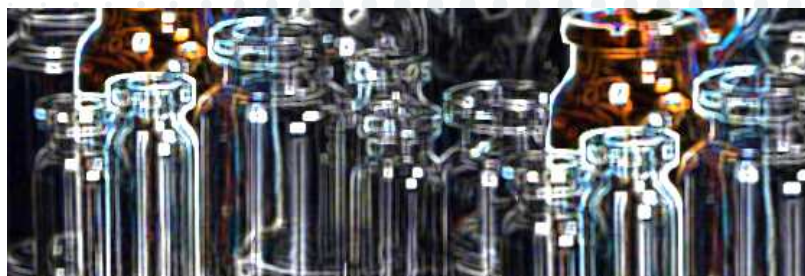
With black Phenolic PolyCone caps attached



with black phenolic rubber lined caps attached



With green thermoset F217 & PTFE Caps enclosed





### Amber Screw Thread Sample Vials

Amber Glass Screw Cap Vials offer protection from harmful light and UV rays for light sensitive products. These general purpose screw thread vials are made of Type I Borosilicate glass, providing exceptional resistance to heat shock and chemical leaching.

Select vials without caps or choose from a wide variety of screw caps, including polypropylene (PP) caps or thermoset and phenolic caps with several different liners.



### Clear Screw Thread Sample Vials

Clear / Flint Screw Thread Sample Vials offer maximum visibility. These general purpose glass vials are made of Type I Borosilicate glass, providing exceptional resistance to heat shock and chemical leaching.

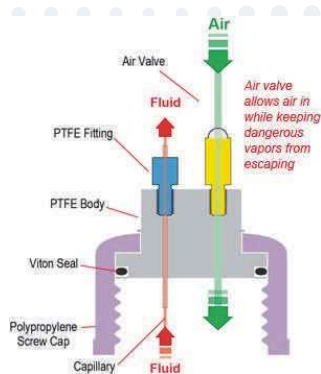




## MOBILE PHASE SAFETY CAPS

## "NANO"

Mobile Phase Safety Caps, Waste Caps, Air Filters and Accessories



### NANO-Safe Caps help protect your health and safety in the lab.

Using dangerous or volatile substances with leaky or unsealed containers leads to:

- Health Hazards
- Contamination of Sensitive Fluids
- Shrinkage of Mobile Phase from Evaporation
- Air and Environmental Pollution

Many safety and environmental directives are already regulated by law, and Canary-Safe Products help you use these toxic or flammable organic substances safely.

#### "NANO" Mobile Phase Bottle Safety Caps

Cat. No.	Description
NC2001	NANO-Safe Cap 1, GL45, 1 Standard Port for 1/8" OD Tubing
NC2002	NANO-Safe Cap 2, GL45, 2 Standard Ports for 1/8" OD Tubing
NC2003	NANO-Safe Cap 3, GL45, 3 Standard Ports for 1/8" OD Tubing
NC2004	NANO-Safe Cap 4, GL45, 4 Standard Ports for 1/8" OD Tubing



#### "NANO" Mobile Phase Bottle Safety Caps with Shut-off Valves



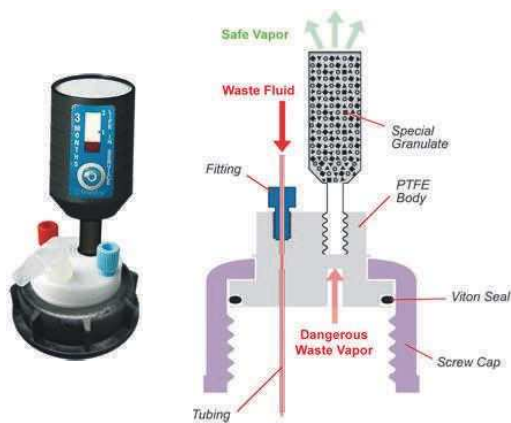
Cat. No.	Description
NC2011	NANO-Safe Cap 1 with Shut-off Valve, GL45, 1 Standard Port for 1/8" OD Tubing
NC2012	NANO-Safe Cap 2 with Shut-off Valves, GL45, 2 Standard Ports for 1/8" OD Tubing
NC2013	NANO-Safe Cap 3 with Shut-off Valves, GL45, 3 Standard Ports for 1/8" OD Tubing



#### Air Valve for Mobile Phase Bottle Safety Caps

Fits NANO mobile phase safety caps and keeps hazardous gases inside the reservoir. Replace every six months for optimum protection against escaping vapors.

Cat. No.	Description
NCF2014	Canary-Safe Filter Check Valve for Mobile Phase Safety Caps



### "NANO" Safety Waste Caps with Exhaust Filters

NANO-Safe Exhaust Filters trap and absorb 99% of dangerous particulate material from solvent waste vapors.

**HEAD OFFICE : USA FACILITY***Lexington, Kentucky, USA***OUR MISSION**

National Chromatography Inco., USA. Is to provide our pharmaceutical customers with the highest quality Custom Syntheses and chromatography market has to offer. With over 20 years of HPLC/ Custom Syntheses experience, we are able to provide an unmatched variety of products with custom tailored answers for even the most difficult separations. Our team of professional Custom Syntheses & chromatographers is available to assist you not only in the selection and purchase of your Columns, but with long term support. National Chromatography Inco., we are constantly innovating and pushing the limits of Custom Syntheses & chromatographers products.

No other company offers more flexibility and choices on a consistent basis than we do. Quality. Choices. Flexibility. Innovation. Support. Five words. One goal. The complete and total satisfaction of our customers.

**SUPPORT**

With over 20 years of hands on experience, we are here to help you even with your most difficult problems. Our staff is eager to assist you. Please let us know how we can be of service!

**QUALITY CERTIFICATE**

Each column & Chromatography products are tested and shipped. All the Custom Syntheses solvents & chromatographers media are bonded at our facility, so the quality and reproducibility of each batch can be closely monitored. All columns are packed and tested on-site as well by our team of production specialists to ensure the highest level of satisfaction for our customers.

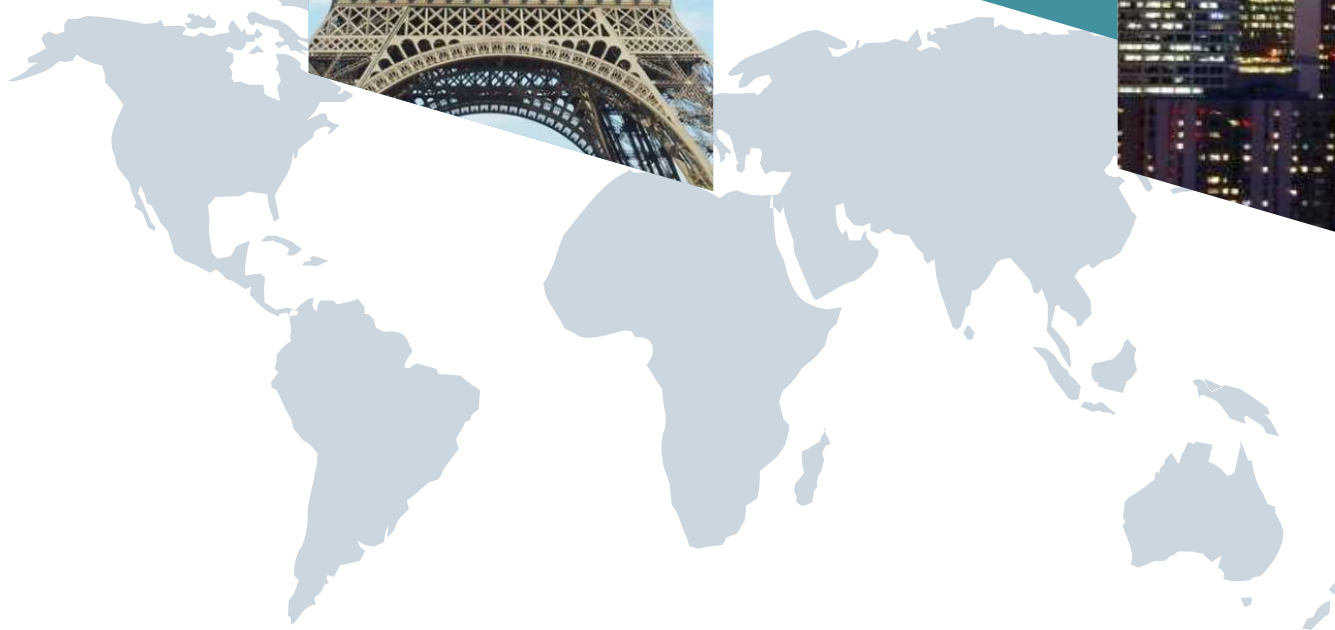
**INNOVATION**

National Chromatography Inco., believes in Technology is always moving forward and the challenges facing our pharmaceutical customers have changed in recent years. We have the ability to react quickly to the changing combi-chem and drug discovery environment and we now offer a wide range of products to meet your high-throughput needs.

**CHOICES****FLEXIBILITY**

With so many stationary phases and column dimensions to choose from, we can make your scale up easy and worry free. From 2.0mm screening columns for LC-MS to kilograms of bulk media, we are with you every step of the way.

*Synthesis Lab**Instrumentation Lab*



[www.ncin.in](http://www.ncin.in)

**NCI**  
**NATIONAL CHROMATOGRAPHY**  **INCO**

**U.S.A**  
National Chromatography Inc.  
4244, Desdemona Way,  
Lexington, KY 40514, USA  
E-mail : [usa@ncin.in](mailto:usa@ncin.in)

**Canada**  
National Chromatography.  
E-mail : [sales@ncin.in](mailto:sales@ncin.in)

**U.K.**  
National Chromatography.  
E-mail : [sales@ncin.in](mailto:sales@ncin.in)

**India**  
National Chromatography Inco.  
#1290, Shirdi Nivas, 2nd Floor,  
Triveni Road, Bangalore- 560022,  
Karnataka  
Ph. No.: 080-23373126, 23572120.  
E-mail : [sales@ncin.in](mailto:sales@ncin.in)

\*Products are available World wide