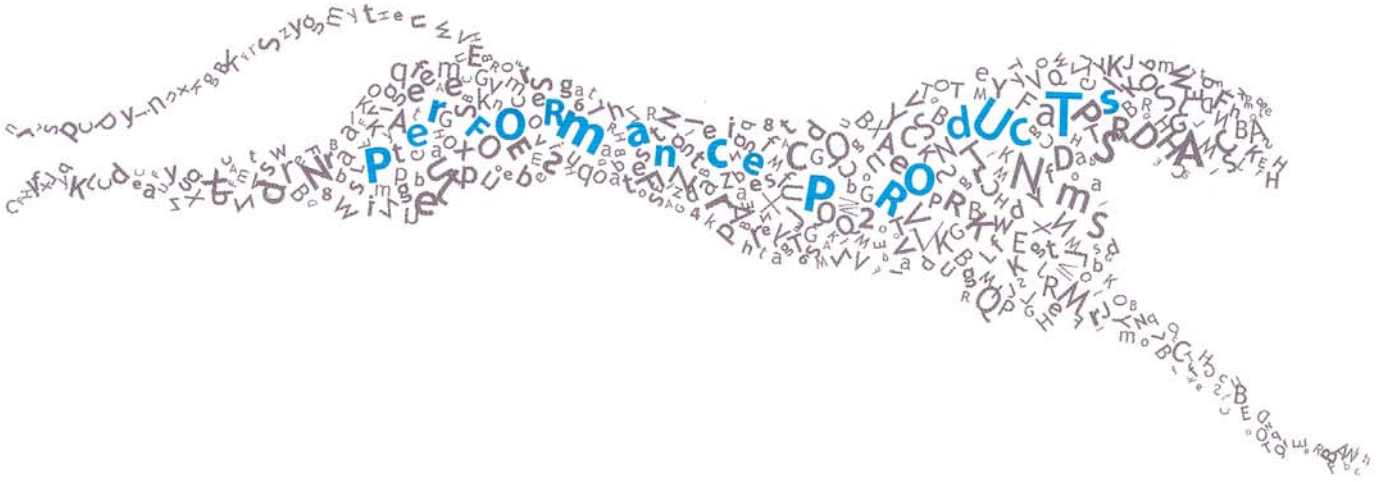
Mallinckrodt Baker | J.T.Baker



Performance Products

- BAKERBOND *Speedisk*™ Extraction Disks

Introduction

In the field of separation science, among numerous chromatography manufacturers, Mallinckrodt Baker stands out with a prominent role understanding customer needs and offering the products of unique separation capabilities for more than 25 years. Our reliable and highly efficient chromatography products for analysis and purification are designed to deliver optimum performance, reproducibility and easy scale-up, without changing the quality of established method. Following the demands in research and development for purity, as well as for improved detection and quantification limits in analytical techniques, we provide the market with a variety of J.T.Baker SPE products with which improve and simplify sample clean-up and concentration.

BAKERBOND *Speedisk*™ - High Performance Solid-Phase Extraction

Comparison between BAKERBOND spe columns and BAKERBOND *Speedisk* columns

Sample preparation step	BAKERBOND spe columns	BAKERBOND *Speedisk* columns
Column Size / Sorbent	1 cc / 100 mg	1 cc /20 mg
Particle Size	40 µm	10 - 25 µm
Sample Volume	2 ml	1 ml
Column conditioning	2 ml (20-40 sec)	0.5 ml (5-10 sec)
Sample addition	2 ml (100 sec)	50 µl -0,5 ml (50 sec)
Washing	1.5 ml (15-20 sec)	0.4 ml (2-5 sec)
Elution	1-2 ml (15-20 sec)	0.3-0.6 ml (2-5 sec)
Sample concentration/ evaporation	3-10 minutes	reduced or eliminated

Fast, innovative and reliable concept

The *Speedisk* columns and disks for solid-phase extraction feature BAKERBOND HPLC particle chemistry that permits rapid, efficient separation without sacrificing capacity.

***Speedisk* columns:**

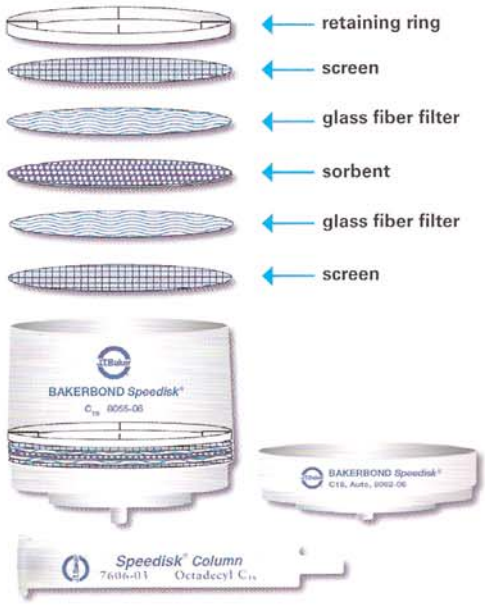
- run 9 times faster than traditional SPE columns
- eliminate or shorten pre-filtration and evaporation steps
- are available as silica and polymer based in different configurations

Featuring a unique laminar configuration, *Speedisk* columns:

- operate with smaller solvent volumes and
- have higher capacity per milligram sorbent than conventional SPE columns

The *Speedisk* design:

- shortens analysis times
- increases capacity and
- may eliminate pre-filtration and evaporation steps



BAKERBOND Speedisk Products are Protected by U.S. Patent No. 5,595,653

BAKERBOND *Speedisk* Extraction Disks

BAKERBOND *Speedisk* extraction disks are the correct choice for samples from 200 mL to 2 L. Our patented disk is pre-assembled for use in preparing aqueous samples for analysis. Its laminar configuration provides filtration capacity and inlet characteristics that maximize access of analyte molecules to the microparticulate sorbent. The BAKERBOND *Speedisk* design resists clogging and ensures high throughput rates even when samples contain solids. Capacity, recovery, and precision are high due to the unique disk configuration and performance of BAKERBOND sorbents.

BAKERBOND *Speedisk* Extraction Disks shorten extraction time to less than one hour. Versatile, silica and polymer based, BAKERBOND *Speedisk* Extraction Disks can be used for clear and particle-rich samples.

BAKERBOND *Speedisk* Extraction Disks:

- Ensure rapid run completion even with dirty samples
- Reduce solvent consumption and hazardous waste
- Improves precision with its optimized flow path design
- Provides additional technology options to meet EPA requirements

The patented BAKERBOND *Speedisk* extraction disk is neither cartrige nor membrane. A thin bed of micro-particles of BAKERBOND sorbent is supported in a laminar structure to maintain speed and capacity and enhance reproducibility of adsorption. The laminar configuration provides filtration capacity and inlet characteristics that maximize access of analyte molecules to the microparticulate sorbent.
BAKERBOND *Speedisk* Extraction Disk design resists clogging and ensures high throughput rates even when samples contain solids.

Capacity, recovery, and precision are high due to the unique disk configuration and performance of BAKERBOND sorbent. With BAKERBOND *Speedisk* extraction disk sample contamination is virtually eliminated:

- Your hands never touch the wetted parts of the pre-assembled disk
- The sorbent and disk housing are pre-cleaned
- Polyester packaging provides a barrier that repels moisture and eliminates the risk of contamination by plastic additives (e.g. phthalates)

BAKERBOND *Speedisk* Extraction Disks are compatible with J.T.Baker standard **vacuum processors** and ***Speedisk* Extraction Station**

Typical applications:

- Multiresidue Analysis Method of Triazines, Organochlorine Pesticides and Polyaromatic Hydrocarbons in Drinking Water
- Phenols in aqueous matrix such as SW 846 Method 8041 or EPA Method 528 analytes
- Extraction of Semivolatile Organic Compounds using a Single pH - EPA Method 8270 Analytes
- Extraction of Carbamates from Water
- Extraction of Chlorinated Acids from Water (EPA Method 515.2)
- Extraction of EPA Method 525.2 Analytes from Water
- Extraction of EPA Method 528 and 8041 Analytes from Water
- Extraction of EPA Method 608/8080 Analytes
- Extraction of EPA Method 8081A or 8082 Analytes - Organochlorine Pesticides or Polychlorinated Biphenyls
- Extraction of Pharmaceuticals from Water
- Extraction of Polycyclic Aromatic Hydrocarbons from Drinking Water
- Extraction of Phthalate and Adipate Esters from Drinking Water

Ordering information:

Description	Product number**
C18 (octadecyl) 50 mm disks for normal water samples	8055-06
C18 (octadecyl) 50 mm disks for water samples, High capacity	8055-07
C18 Polar Plus 50 mm disks for water samples containing slightly polar to non-polar analytes	8061-06
C18 XF (Extra filter) 50 mm disks for crude and dirty samples	8056-06
C8 (octyl) 50 mm disks for diquat/paraquat	8057-06
H_2O Phobic DVB (DiVinylBenzene) 50 mm disks for chlorinated acids	8068-06
H_2O Phobic DVB (DiVinylBenzene) 50 mm disks, High capacity*	8068-07
H_2O Philic DVB (DiVinylBenzene) 50 mm disks for chlorinated acids	8072-06
H_2O Philic DVB (DiVinylBenzene) 50 mm disks, High capacity*	8072-07
Oil & Grease 50 mm disks for hydrocarbons / Oil & Grease	8060-06
SAX (strong Anion Exchanger) 50 mm disks for haloacetic acids / Dalapon	8058-06

* *High capacity: higher sorbent mass*
** *Quantity per box 20*

PROCESSORS AND EXTRACTION STATION

J.T.Baker *Speedisk* standard vacuum processors offer the flexibility of processing SPE devices of different heights, diameters, or formats during the same experiment. The vacuum box design is familiar throughout the industry, and it supports all devices and accessories with luer-type fittings such as BAKERBOND spe, *Speedisk* columns as well as *Speedisk* extraction disks.

Speedisk Expanded Extraction Station

Whatever your space and sample loading requirements, we have a vacuum extraction disk processor to meet your needs - *Speedisk* Expanded Extraction Station used in reservoir, inverted, or remote sample feed modes. The *Speedisk* Expanded Extraction Station includes a six-port vacuum manifold and the accessories needed to support the extraction of analyte by BAKERBOND *Speedisk* laminar extraction disks. The manifold has a rectangular footprint and inter-port spacing to accommodate six, side-by-side, 1 liter sample reservoirs. Each vacuum port has an individual open/close valve.

Description	Quantity per box	Product Number
***Speedisk* EXTRACTION STATIONS**		
Expanded extraction station Six-port processing system for direct sample loading. Rectangular footprint and inter-port spacing to accommodate six side-by-side 1 L sample reservoirs Includes: extraction station, 2 remote sample adapters, 2 collection chambers and 2 vials, 6 reservoirs of 185 ml	1	8095-06
***Speedisk* ADAPTERS**		
Remote sample adapter For transfer of sample from remote container to *Speedisk*™ Disk	6	8099-06
Flask Adapter Single port with #8 stopper Connection of disks to vacuum flask and many other vacuum manifolds/Accepts disks or collection chamber	1	8070-01
Adapter ring For 40-35 tapered outer joint/Accepts disks or collection chamber	6	8100-06
***Speedisk* RESERVOIRS**		
185 ml Reservoir Holds inverted 1 L reservoir or 185 ml sample	6	8097-06
1 L Glass reservoir (1 L sample reservoir), fits into a *Speedisk* extraction disk	1	8098-01
Collection chamber (includes sample vial)	2	8096-02
Collection vials (Sample vials)	100	8102-01
Sample tray Holds up to four 1 L bottle at a tilt to ensure complete sample uptake by remote sample adapter suction tube	1	8101-01
70 mm / Mason Jar Adapter Enables inverted feed directly to extraction disk from sample jar	4	8102-04