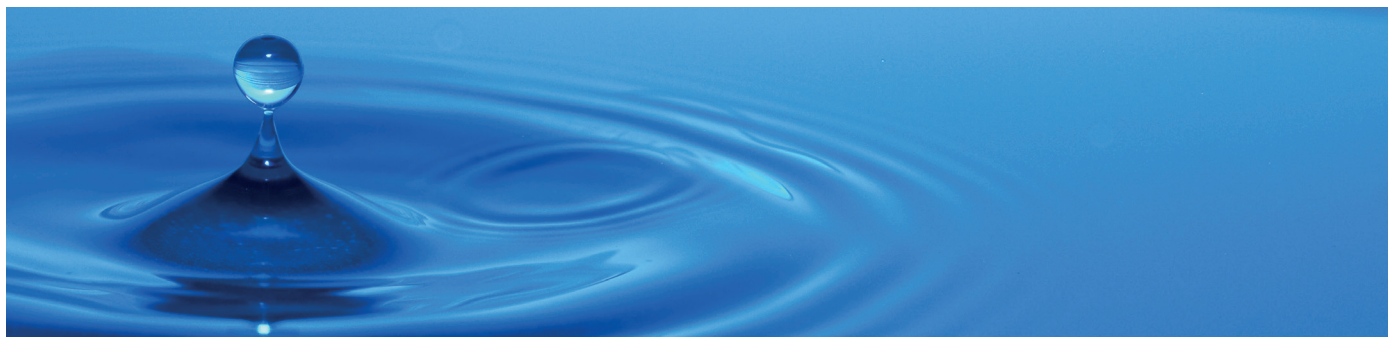


For Research Use Only. NOT for Use in Diagnostic Procedures.

# EVOLUTE® EXPRESS ABN On-line SPE Cartridges

For Integrated Sample Preparation and Analysis



EVOLUTE® EXPRESS ABN is a high purity, polymeric sorbent suitable for extraction of a broad range of acidic, basic and neutral analytes. EVOLUTE EXPRESS ABN is now available in on-line cartridge format.



An optimized combination of non-polar (hydrophobic) and polar (hydrophilic) interactions result in a versatile sorbent for extraction of a broad range of compounds encountered in routine environmental analysis. Because EVOLUTE® EXPRESS ABN is totally water wettable, it will never become de-conditioned, even if it runs dry. It does not need to be stored in solvent after use, and is a great alternative to C18 and PLRP type materials.

Biotage EVOLUTE EXPRESS ABN on-line cartridges combine these unique sorbent characteristics with the convenience of fully automated SPE.

## Typical Applications

- » Pharmaceuticals
- » Personal care products
- » General organics
- » Acidic, basic and neutrals

### EVOLUTE® EXPRESS ABN On-line SPE Cartridges

Nominal Particle Size	20 µm
Pore Size	40 Å
Surface area	400 m <sup>2</sup> /g
pH Stability	1–14
Recommended Flow Rates	1–4 mL/min (typically 2–3 mL/min for loading, <1 mL/min during backflush/separation)
Maximum Operating Pressure	4000 psi

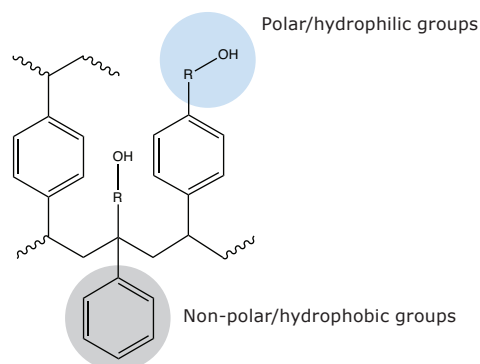


Figure 1. Structure of wettable EVOLUTE® EXPRESS ABN sorbent.

## Recommended Starting Conditions

<b>SPE load mobile phase</b>	0–5% aq (v/v) acetonitrile with 0.1% formic acid
<b>SPE elution/transfer mobile phase</b>	5–100% aq (v/v) acetonitrile with 0.1% formic acid

## Ordering Information

Part Number	Description	Quantity
<b>OSPE-620-32150</b>	EVOLUTE® EXPRESS ABN On-line SPE cartridge 30 x 2.1 mm	1

## Method Development Hints and Tips

- » To increase recovery of acidic analytes, acidify the sample using formic acid or hydrochloric acid
- » To increase the recovery of basic analytes, add ammonium hydroxide to basify the sample
- » If sample has a high particulate content, consider filtration prior to extraction
- » EVOLUTE® EXPRESS ABN has an optimized pore size and EVOLUTE EXPRESS ABN on-line SPE columns will maintain performance for >200 injections per cartridge (matrix dependent).

See technical note PPS424 for additional guidance on on-line SPE-LC-MS/MS method development.



### EUROPE

Main Office: +46 18 565900  
Toll Free: +800 18 565710  
Fax: +46 18 591922  
Order Tel: +46 18 565710  
Order Fax: +46 18 565705  
order@biotage.com  
Support Tel: +46 18 56 59 11  
Support Fax: +46 18 56 57 11  
eu-1-pointsupport@biotage.com

### NORTH & LATIN AMERICA

Main Office: +1 704 654 4900  
Toll Free: +1 800 446 4752  
Fax: +1 704 654 4917  
Order Tel: +1 704 654 4900  
Order Fax: +1 434 296 8217  
ordermailbox@biotage.com  
Support Tel: +1 800 446 4752  
Outside US: +1 704 654 4900  
us-1-pointsupport@biotage.com

### JAPAN

Tel: +81 3 5627 3123  
Fax: +81 3 5627 3121  
jp\_order@biotage.com  
jp-1-pointsupport@biotage.com

### CHINA

Tel: +86 21 2898 6655  
Fax: +86 21 2898 6153  
cn\_order@biotage.com  
cn-1-pointsupport@biotage.com

To locate a distributor,  
please visit our website  
[www.biotage.com](http://www.biotage.com)

Part Number: PPS423.V.1

© 2016 Biotage. All rights reserved. No material may be reproduced or published without the written permission of Biotage. Information in this document is subject to change without notice and does not represent any commitment from Biotage. E&OE. A list of all trademarks owned by Biotage AB is available at [www.biotage.com/legal](http://www.biotage.com/legal). Other product and company names mentioned herein may be trademarks or registered trademarks and/or service marks of their respective owners, and are used only for explanation and to the owners' benefit, without intent to infringe. **FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.**