# **EVOLUTE<sup>®</sup> 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.



#### EVOLUTE<sup>®</sup> 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<br>(typically 2–3 mL/min for<br>loading,<br><1 mL/min during<br>backflush/separation) |
| Maximum Operating Pressure | 4000 psi   |

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

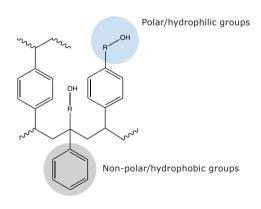


Figure 1. Structure of wettable EVOLUTE° EXPRESS ABN sorbent.



### **Recommended Starting Conditions**

SPE load mobile phase

0–5% aq (v/v) acetonitrile with 0.1% formic acid

SPE elution/transfer mobile phase

5–100% aq (v/v) acetonitrile with 0.1% formic acid

## 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.

EVOLUTE®EXPRESS ABN On-line SPE cartridge 30 x 2.1 OSPE-620-32150

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#### Part Number: PPS423

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## **Ordering Information**

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