

Application Note

EXTRACTION OF POLYCYCLIC AROMATIC HYDROCARBONS FROM DRINKING WATER EPA METHOD 8100

Field	Environmental
Sample	EPA Method 8100 Analytes
Matrix	Aqueous
Extraction Disk	BAKERBOND Speedisk™ C18 Extraction Disk, Product Number 8055-06
Safety and Protective Equipment	Goggles and face shield, lab coat and apron, proper gloves, vent hood, Type B fire extinguisher.
Sample Preparation	To a 1 L sample (pH 7), methanol (2–5 mL) may be added to obtain a more homogeneous sample. Mix well.
Extraction Disk Conditioning	Assemble a <i>Speedisk</i> ™ extraction station. (Other types of vacuum stations can also be used.) Mount disk on vacuum port. Wash the disk with 10 mL of methylene chloride. Let soak 1 minute and pull through. Continue to pull air through for 1 minute. Add 10 mL of methanol to the disk. Pull through only a small amount of methanol and stop the vacuum. Let the disk soak for 1 minute. Pull through most of the remaining methanol, leaving 3–5 mm of methanol above the surface of the disk. From this point to the end of the sample addition, do not allow the disk to run dry. Repeat using 10 mL of organic-free water.
Sample Addition	Add the water sample under full vacuum. Dry the disk by maintaining full vacuum (about 25" Hg) for about 5 minutes.
Sample Elution	Remove the BAKERBOND Speedisk™ extraction disk from the extraction station and insert a suitable collection vial. Add 5 mL of acetonitrile to the sample bottle to rinse. Transfer the acetonitrile to the disk. Let this soak for 1 minute and then pull through to the collection vial. Repeat this twice with 10 mL methylene chloride.
Drying And Concentrating The Eluate	Dry the combined extracts, which are in the collection vial, by passing them through anhydrous sodium sulfate. (Additional anhydrous sodium sulfate may be used if the extract is still cloudy.) Rinse the collection tube and the sodium sulfate with two 5 mL portions of methylene chloride. Combine the extract and washings and concentrate to 1 mL under nitrogen gas. Note: Do not concentrate below 0.5 mL
Final Analytical Method	GC/FID (Refer to SW-846 EPA Method 8100.)

Product List

Product Number	Description
8055-06	BAKERBOND Speedisk™ C18 Extraction Disk
9264	Methylene Chloride, ULTRA RESI-ANALYZED™
9255	Acetonitrile, ULTRA RESI-ANALYZED™
9263	Methanol, ULTRA RESI-ANALYZED™
4219	Water, ULTRA RESI-ANALYZED™
3375	Sodium Sulfate, Anhydrous, Granular, ULTRA RESI-ANALYZED™ Reagent



Customer Service & Sales Support

Austria

Tel.: +43 1 97 002 0
Email: info.at@vwr.com

Belgium

Tel.: +32 (0) 16 385 011
Email: vwr.be@vwr.com

Czech Republic

Tel.: +420 321 570 321
Email: info.cz@vwr.com

Denmark

Tel.: +45 43 86 87 88
Email: info.dk@vwr.com

Finland

Tel.: +358 (0) 9 80 45 51
Email: info.fi@vwr.com

France

Tel.: 0 825 02 30 30* (national)
Tel.: +33 (0) 1 45 14 85 00 (international)
Email: info.fr@vwr.com
* 0,18 € TTC/min

Germany

Tel.: 0800 702 00 07* (national)
Tel.: +49 (0) 6151 3972 0 (international)
Email: info.de@vwr.com
*Freecall

Hungary

Tel.: +36 52 521130
Email: info.hu@vwr.com

Ireland / Northern Ireland

Tel.: +353 (0) 1 88 22 222
Email: sales.ie@vwr.com

Italy

Tel.: +39 02 3320311
Email: info.it@vwr.com

The Netherlands

Tel.: +31 (0) 20 4808 400
Email: info.nl@vwr.com

Norway

Tel.: +47 22 90 00 00
Email: info.no@vwr.com

Poland

Tel.: +48 58 32 38 200
Email: info.pl@vwr.com

Portugal

Tel.: +351 21 3600 770
Email: info.pt@vwr.com

Spain

Tel.: +34 902 222 897
Email: info.es@vwr.com

Sweden

Tel.: +46 (0) 8 621 34 00
Email: kundservice.se@vwr.com

Switzerland

Tel.: +41 (0) 44 745 13 13
Email: info.ch@vwr.com

UK

Tel.: +44 (0) 800 22 33 44
Email: uksales@vwr.com

Corporate Headquarters

Avantor, Inc.
3477 Corporate Parkway
Center Valley, PA 18034 USA
www.avantorinc.com
Toll Free: +1-855-AVANTOR (1-855-282-6867)
Outside of US Tel: +1-610-573-2600

Avantor, Inc. Europe

Poland Spółka Akcyjna
ul. Sowińskiego 11
44-101 Gliwice, Poland
Tel.: +48 32 2392 000
avantor.pl@avantorinc.com
www.avantorinc.com