

Application Note

Extraction of Phthalate and Adipate Esters from Drinking Water EPA Method 506

Field	Environmental
Sample	EPA Method 506 Analytes
Matrix	Drinking Water and Ground Water
Extraction Disk	BAKERBOND™ <i>Speedisk</i> ™ C ₁₈ 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, 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 5 mL of methylene chloride. Let soak 1 minute and pull through. Continue to pull air through for 1 minute. Add 5 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 <i>Speedisk</i> ™ 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 5 mL methylene chloride.
Drying And Concentrating The Eluate	Dry the combined eluates, 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 0.5 mL under nitrogen gas. Note: Do not concentrate below 0.5 mL
Final Analytical Method	GC/PID (Refer to EPA Method 506).

Product List

Product Number	Description
8055-06	BAKERBOND <i>Speedisk</i> ™ C ₁₈ Extraction Disk
9264-03	Methylene Chloride, ULTRA RESI-ANALYZED™
9255-02	Acetonitrile, ULTRA RESI-ANALYZED™
9263-02	Methanol, ULTRA RESI-ANALYZED™
4219-03	Water, ULTRA RESI-ANALYZED™
3375-01	Sodium Sulfate, Anhydrous, Granular, ULTRA RESI-ANALYZED™ Reagent



Phillipsburg, NJ 9001:2008 & 14001:2004
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Deventer, the Netherlands 9001:2008 & 14001:2004 & 13485:2003
Selangor, Malaysia 9001:2008

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