# WORRY-FREE SAMPLE PREPARATION FOR FOOD AND ENVIRONMENTAL ANALYSIS

Agilent Bond Elut sample preparation ensures reproducible results right from the start

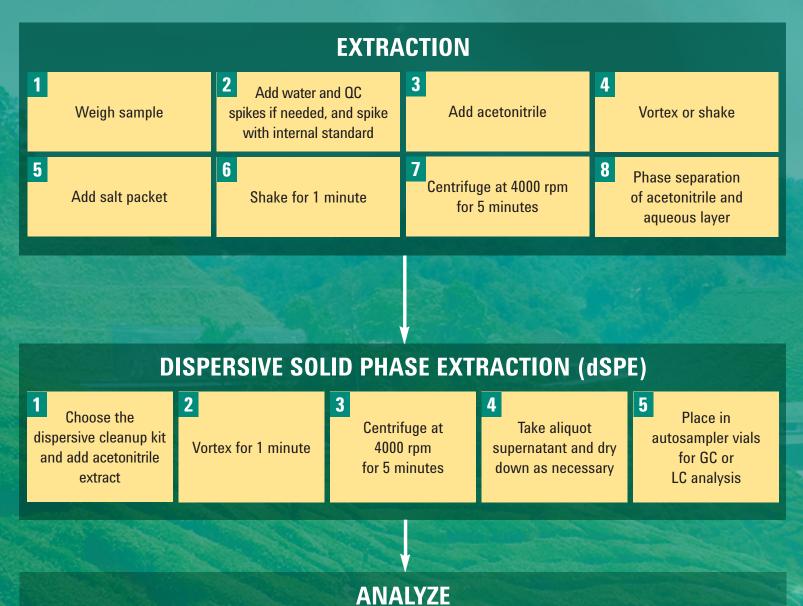


## Save time and labor

### **QuECHERS Kits**

These easy-to-use kits remove interfering matrix compounds, allowing you to analyze samples for a broad range of pesticides, veterinary drugs, environmental contaminants, and other compounds of interest

#### **General Protocol for QuEChERS**



#### **QuEChERS** application notes

#### Food

**Environmental** 

5990-4977EN Agilent Food Safety Applications Notebook: Volume 2 – Bond Elut QuEChERS
5991-3638EN Sample Prep for Trace Analysis of Adulterants in Erectile Dysfunction Dietary Supplements
5991-5553EN QuEChERS Combined with GC/MS/MS for Analysis of Over 200 Pesticides in Cereals

5990-5452EN Analysis of Polycyclic Aromatic Hydrocarbons in Soil with Agilent Bond Elut HPLC-FLD

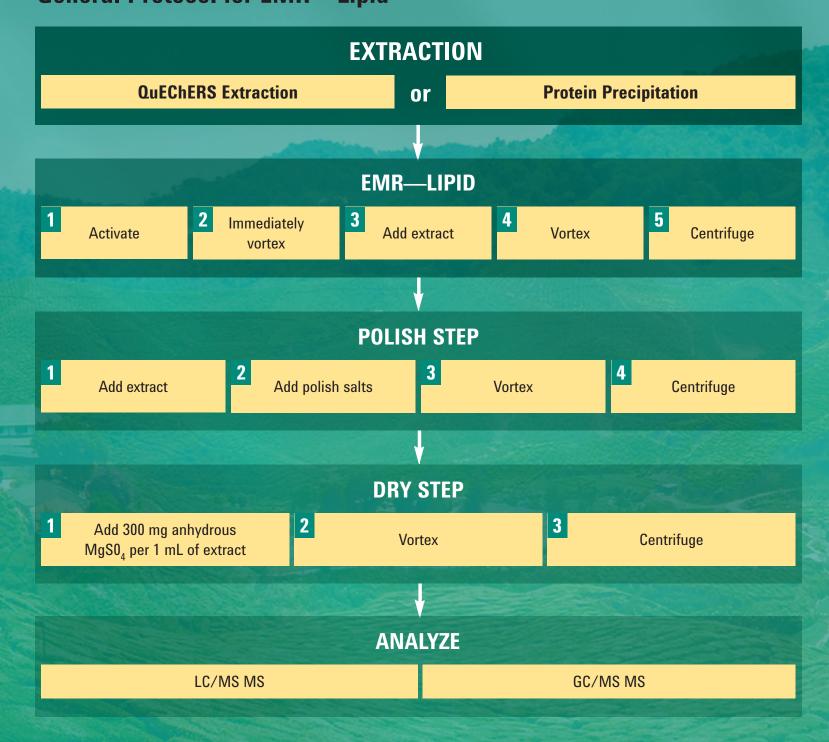
For more application notes please visit: www.agilent.com

# Lose the lipids, keep your analytes

### Enhanced Matrix Removal—Lipid

The innovative sorbent in Enhanced Matrix Removal—Lipid (EMR—Lipid) works with your current QuEChERS methodology to selectively remove lipids in complex matrices, without losing analytes of interest.

#### **General Protocol for EMR—Lipid**



#### **EMR—Lipid application notes**

#### Food

5991-6818EN Aflatoxin Analysis in Infant Formula with Enhanced Matrix Removal—Lipid by LC/MS/MS
5991-6097EN Multiresidue Analysis of Pesticides in Avocado by GC/MS/MS with
Bond Elut Enhanced Matrix Removal—Lipid

5991-6096EN Multiresidue Analysis of Veterinary Drugs in Bovine Liver by LC/MS/MS with Bond Elut Enhanced Matrix Removal—Lipid

#### Environmental

5991-6088EN PAH Analysis in Salmon with Bond Elut Enhanced Matrix Removal—Lipid

# Confidently clean samples and elute analytes Bond Elut SPE

The Bond Elut SPE family provides the largest choice of sorbent formats in the market today and includes polymeric SPE phases: Plexa (non-polar polymeric), Plexa PCX (cation exchanger mixed mode), and Plexa PAX (anion exchanger mixed mode).

#### **General Protocol for Trouble-free SPE**

	ACIDS	NEUT	RALS	BASES	
Analyte	LogP > 1.0 pKa < 5	LogP pKa 3-6	> 1.5 pKa 6-10	LogP > 0.8 pKa 6-10	
	PLEXA PAX	PLEXA Acid Load Method	PLEXA Base Load Method	PLEXA PCX	
Sample Pre-treatment	2% NH <sub>4</sub> 0H	1% HCO <sub>2</sub> H	2% NH <sub>4</sub> OH	2% H <sub>3</sub> PO <sub>4</sub>	
Sorbent Condition	100% MeOH	100%	MeOH	100% MeOH	
Equilibration	100% H <sub>2</sub> 0	100%	6 Н <sub>2</sub> О	100% H <sub>2</sub> 0	
Load		Apply pre-tre	eated sample		
Wash	100% H <sub>2</sub> 0	5% Me0	OH in H <sub>2</sub> O	2% HCO <sub>2</sub> H in H <sub>2</sub> O	
Elution 1/Wash 2	100% MeOH Neutrals		Me0H itrals	1:1 MeOH/ACN Acids, Neutrals	
Elution 2	5% HCO <sub>2</sub> H in MeOH Acids			5% NH <sub>3</sub> in 1:1 MeOH/A Bases	
Analysis	Prepare extracts for instrumental analysis				

#### **SPE** application notes

5990-4917EN	Agilent Food Safety Applications Notebook: Volume 1 – SPE, SPME, SLE, and Captiva Filtratio
5991-5414EN	Analyze Quinolone Residues in Milk with an Agilent Poroshell 120 4 µm Column
5991-5421EN	Analyze Sulfonamide Residues in Pork with Agilent Poroshell 120 EC-C18, 4 µm Columns

### Environmental 5004 FN 60

5991-5304EN Solid Phase Extraction of Organophosphorus Pesticides in Water with Agilent Bond Elut PPL
5991-5490EN Monitoring of Bisphenol A and its Analogues in Environmental Matrices Using the
Agilent 6550 Q-TOF LC/MS

5991-5594EN EPA – Method 540: Selected Organic Contaminants Using Agilent Plexa Cartridges

# Bond Elut QuEChERS, EMR—Lipid, and SPE Part Numbers

#### Bond Elut QuEChERS Extraction Kits

			Part No.	Part No. <i>Pac</i>	kets Only
Method	Buffered	Contents	With Tubes	50/pk	200/pk
A0AC 2007.01	Yes	6 g MgSO <sub>4</sub> ; 1.5 g NaAcetate	5982-5755	5982-6755	5982-7755
Original (10 g samples)	No	4 g MgSO <sub>4</sub> ; 1 g NaCl	5982-5550	5982-6550	5982-7550
Original (15 g samples)	No	6 g MgSO <sub>4</sub> ; 1.5 g NaCl	5982-5555	5982-6555	5982-7555
EN 15662	Yes	4 g MgSO <sub>4</sub> ; 1 g NaCl; 1 g NaCitrate; 0.5 g disodium citrate sesquihydrate	5982-5650	5982-6650	5982-7650
Acrylamides	No	4 g MgSO <sub>4</sub> ; 0.5 g NaCl	5982-5850		
Veterinary Drugs	No	4 g Na <sub>2</sub> SO <sub>4</sub> ; 1 g NaCl	5982-0032		

#### **Bond Elut QuEChERS Dispersive Kits**

			AUAC 2007.01 Method	European Method EN 15662			
Kit	Size	Unit	Kit Contents Part No.	Kit Contents Part No.			
General fruits and vegetables	15 mL	50/pk	400 mg PSA, 1200 mg MgSO <sub>4</sub> 5982-5058, 5982-5058CH	150 mg PSA, 900 mg MgSO <sub>4</sub> 5982-5056, 5982-5056CH			
Fruits and vegetables with fats and waxes	15 mL	50/pk	400 mg PSA, 400 mg C18EC, 1200 mg MgSO <sub>4</sub> 5982-5158, 5982-5158CH	150 mg PSA, 150 mg C18EC, 900 mg MgSO <sub>4</sub> 5982-5156, 5982-5156CH			
Pigmented fruits and vegetables	15 mL	50/pk	400 mg PSA, 400 mg GCB, 1200 mg MgSO <sub>4</sub> 5982-5258, 5982-5258CH	150 mg PSA, 15 mg GCB, 885 mg MgSO <sub>4</sub> 5982-5256, 5982-5256CH			
Highly pigmented fruits and vegetables	15 mL	50/pk		150 mg PSA, 45 mg GCB, 855 mg MgSO <sub>4</sub> 5982-5356, 5982-5356CH			
Fruits and vegetables with pigments and fats	15 mL	50/pk	400 mg PSA, 400 mg GCB, 1200 mg MgSO <sub>4</sub> 400 mg C18EC, 5982-5456, 5982-5456CH				
Other food methods	15 mL	50/pk	150 mg C18, 900 mg MgSO <sub>4</sub> 5982-4956, 5982-4956CH				
All food types (universal)	15 mL	50/pk	400 mg PSA, 400 mg C18, 45 mg GCB 1200 MgSO <sub>4</sub> , 5982-0029, 5982-0029CH				
Part numbers ending in CH indicate tubes containing ceramic homogenizers.							

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500 mg, 12 mL 20/pk 327832

#### EMR—Lipi

Elvin—Lipiu						
	Description	Unit	Part No.			
	Bond Elut EMR—Lipid dSPE	50/pk	5982-1010			
	Bond Elut EMR—Lipid Final Polish Tube	50/pk	5982-0101			
	Bond Elut EMR—Lipid MgSO <sub>4</sub> Polish Pouch	50/pk	5982-0102			

#### ut Plexa PCX Bond Elut Plexa PCX Bond Elut Plexa PAX

		Dona Liuci Ioxu I ox			Dolla Liat I Toxa I AA				
Unit	Part No.	Description	Unit	Part No.	Description	Unit	Part No		
aight Barrel Cartridges			Straight Barrel Cartridges			Straight Barrel Cartridges			
100/pk	12109301	30 mg, 1 mL	100/pk	12108301	30 mg, 1 mL	100/pk	1210730		
50/pk	12109303	60 mg, 1 mL	100/pk	12108601	60 mg, 1 mL	100/pk	1210760		
100/pk	12109601	30 mg, 3 mL	50/pk	12108303	30 mg, 3 mL	50/pk	1210730		
50/pk	12109603	60 mg, 3 mL	50/pk	12108603	60 mg, 3 mL	50/pk	1210760		
50/pk	12109610	200 mg, 6 mL	30/pk	12108206	200 mg, 6 mL	30/pk	1210720		
30/pk	12109206	500 mg, 6 mL	30/pk	12258506	500 mg, 6 mL	30/pk	1225750		
30/pk	12259506					- Comment			
50/pk	12169610B								
	100/pk 50/pk 100/pk 50/pk 50/pk 50/pk 30/pk 30/pk	100/pk 12109301 50/pk 12109303 100/pk 12109601 50/pk 12109603 50/pk 12109610 30/pk 12109206 30/pk 12259506	Unit         Part No.           dges         Straight Barrel Car           100/pk         12109301           50/pk         12109303           100/pk         12109601           50/pk         12109603           50/pk         12109610           30/pk         12109206           30/pk         12259506	Unit         Part No.           dges         Straight Barrel Cartridges           100/pk         12109301           50/pk         12109303           100/pk         12109601           50/pk         12109603           50/pk         12109610           30/pk         12109206           30/pk         12259506	Unit         Part No.           dges         Straight Barrel Cartridges           100/pk         12109301           50/pk         12109303           100/pk         12109601           50/pk         12109603           50/pk         12109610           30/pk         12109206           30/pk         12259506    Description Unit Part No.  Part No.  Description Unit Part No.  Part No.  Description Unit Part No.  Straight Barrel Cartridges  30 mg, 1 mL 100/pk 12108601 30 mg, 3 mL 50/pk 12108303 60 mg, 3 mL 50/pk 12108603 200 mg, 6 mL 30/pk 12108206 500 mg, 6 mL 30/pk 12258506	Unit         Part No.           dges         Straight Barrel Cartridges         Straight Barrel Cartridges           30 mg, 1 mL         100/pk         12108301         30 mg, 1 mL         30 mg, 1 mL         60 mg, 1 mL         60 mg, 1 mL         60 mg, 1 mL         60 mg, 1 mL         30 mg, 3 mL         60 mg, 3 mL         30 mg, 3 mL         60 mg, 3 mL         30 mg, 3 mL         200 mg, 6 mL         30/pk         12108206         200 mg, 6 mL         200 mg, 6 mL         500 mg, 6 mL	Unit         Part No.           dges         Straight Barrel Cartridges           100/pk         12109301           50/pk         12109303           100/pk         12109601           50/pk         12109603           50/pk         12109603           50/pk         12109610           30/pk         12109206           30/pk         12259506    Description Unit Straight Barrel Cartridges  30 mg, 1 mL 100/pk 12108601 60 mg, 1 mL 100/pk 12108803 30 mg, 3 mL 50/pk 12108603 60 mg, 3 mL 50/pk 12108603 60 mg, 3 mL 50/pk 500 mg, 6 mL 30/pk 12258506 500 mg, 6 mL 30/pk 500 mg, 6 mL 30/pk		

### Optimize productivity from sample prep to analysis and support





## High-performing Agilent columns

Agilent J&W Ultra Inert GC columns deliver consistent column inertness and exceptionally low column bleed for lower LODs and more accurate data.

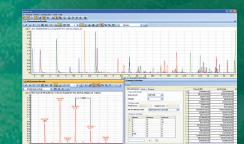
For the most efficient LC separations and reproducible results, choose InfinityLab Poroshell 120 LC columns.



# Agilent QQQ and Q-TOF instruments

Multi-target screening: Agilent 6400 Series QQQ LC/MS and 7000C QQQ GC/MS

Non-targeted screening: Agilent 6500 Series Accurate-Mass Q-TOF and 7200 GC/Q-TOF



## **MassHunter Software**

MassHunter enables you to produce high-quality MS data for targets and unknowns. The software helps your lab transform data into action.



#### **Agilent Services**

Agilent CrossLab offers a comprehensive suite of enterprise services, learning and consultative solutions, as well as instrument services to maximize uptime, simplify administration, and protect the investments in your laboratory.



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