

APPLICATION

Comprehensive LC/MS/MS Analysis of Over 180 Pesticides with a Kinetex[®] Biphenyl Core-Shell LC Column

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Overview

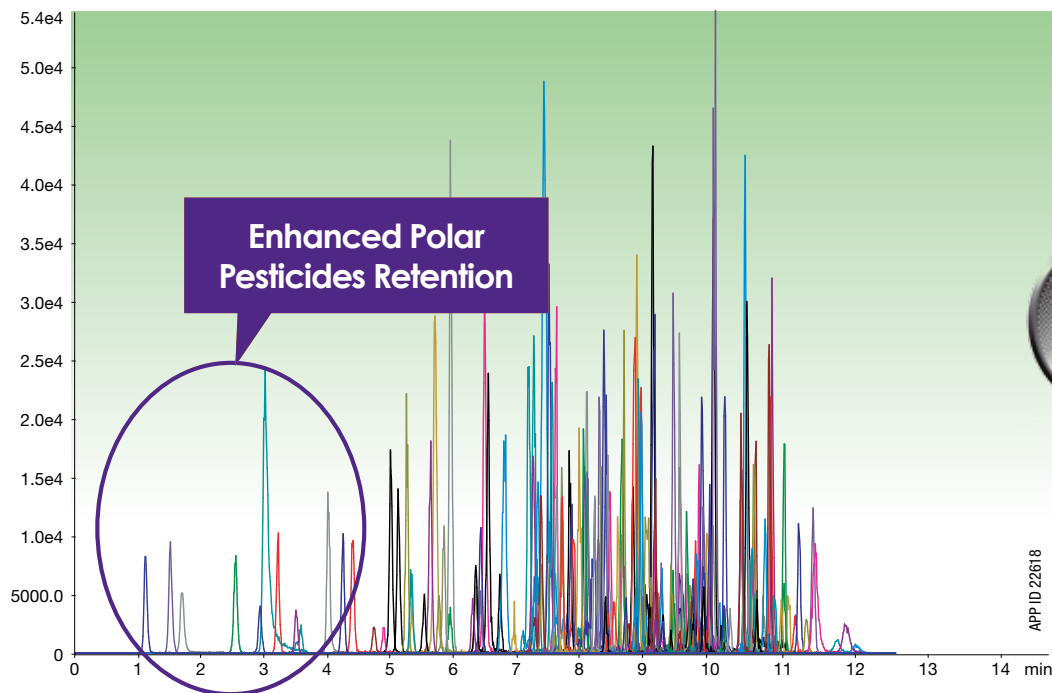
A method is illustrated for the comprehensive screen of over 180 pesticides using the Kinetex 5 μ m Biphenyl core-shell column. Multi-class pesticide screens are a very common environmental and food based analysis that serves to check and ensure the use of highly regulated compounds in food stuffs and agricultural samples. As pesticide residues are known to be potentially harmful to both human and animal health, the current trend of this analysis has focused on the use of very large LC/MS/MS screens for compound identification and quantification. With its high efficiency and ability to blend polar, aromatic, and hydrophobic retention properties, the Kinetex Biphenyl provides the necessary performance and separation for this type of extensive screen. Now laboratories can easily utilize a Kinetex Biphenyl core-shell column to effectively monitor for a wide range of pesticides, especially highly polar pesticides that are typically not retained by C18 stationary phases.

LC/MS/MS Conditions

Column:	Kinetex 5 μ m Biphenyl 100 Å	
Dimensions:	100 x 2.1 mm	
Part No.:	00D-4627-AN	
Mobile Phase:	A: 5 mM Ammonium formate in Water B: 5 mM Ammonium formate in Methanol	
Gradient:	Time (min)	% B
	0.01	10
	1.00	10
	10.00	90
	15.00	90
	15.10	10
	20.00	10
Flow Rate:	0.5 mL/min	
Temperature:	35 °C	
Detection:	Tandem Mass Spectrometer (MS/MS) (0 °C)	
Detector:	AB SCIEX 4500 QTRAP [®]	
Sample:	180 + pesticide mix	

Find more information on Kinetex core-shell HPLC and UHPLC columns at:

www.phenomenex.com/kinetex



APPLICATION

Kinetex Ordering Information

5 μ m Minibore Columns (mm)				SecurityGuard TM ULTRA Cartridges [†]
Phases	30 x 2.1	50 x 2.1	100 x 2.1	3/pk
Biphenyl	00A-4627-AN	00B-4627-AN	00D-4627-AN	AJO-9209 for 2.1 mm ID

5 μ m MidBore TM Columns (mm)				SecurityGuard ULTRA Cartridges [†]
Phases	50 x 3.0	100 x 3.0	150 x 3.0	3/pk
Biphenyl	00B-4627-YO	00D-4627-YO	00F-4627-YO	AJO-9208 for 3.0 mm ID

5 μ m Analytical Columns (mm)					SecurityGuard ULTRA Cartridges [†]
Phases	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	3/pk
Biphenyl	00B-4627-E0	00D-4627-E0	00F-4627-E0	00G-4627-E0	AJO-9207 for 4.6 mm ID

2.6 μ m Minibore Columns (mm)					SecurityGuard ULTRA Cartridges [†]
Phases	30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
Biphenyl	00A-4622-AN	00B-4622-AN	00D-4622-AN	00F-4622-AN	AJO-9209 for 2.1 mm ID

2.6 μ m MidBore Columns (mm)				SecurityGuard ULTRA Cartridges [†]
Phases	50 x 3.0	100 x 3.0	150 x 3.0	3/pk
Biphenyl	00B-4622-Y0	00D-4622-Y0	00F-4622-Y0	AJO-9208 for 3.0 mm ID

2.6 μ m Analytical Columns (mm)				SecurityGuard ULTRA Cartridges [†]
Phases	50 x 4.6	100 x 4.6	150 x 4.6	3/pk
Biphenyl	00B-4622-E0	00D-4622-E0	00F-4622-E0	AJO-9207 for 4.6 mm ID

1.7 μ m Minibore Columns (mm)				SecurityGuard ULTRA Cartridges [†]
Phases	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
Biphenyl	00B-4628-AN	00D-4628-AN	00F-4628-AN	AJO-9209 for 2.1 mm ID

[†]SecurityGuard ULTRA Cartridges require holder, Part No.: AJO-9000



If Phree Phospholipid Removal products do not perform as well or better than your current phospholipid removal product, return the product with your comparative data within 45 days for a FULL REFUND.

Terms and Conditions
Subject to Phenomenex Standard Terms and Conditions, which may be viewed at <http://www.phenomenex.com/TermsAndConditions>.

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