



Agilent Technologies

Agilent Bond Elut PPL

A collection of citations to advance your research

Table of contents

[Clinical research](#)

[Environmental](#)

[Food testing and agriculture](#)

Clinical research

[A GC–MS/MS method for the quantitative analysis of low levels of the tyrosine metabolites maleylacetone, succinylacetone, and the tyrosine metabolism inhibitor dichloroacetate in biological fluids and tissues](#)

Journal of Chromatography B, **837**, 125-132
(2006)
Melissa D. Zolodz *et al.*

Tags
Bond Elut PPL, clinical research, disease
research

Abstract

An investigation of tyrosine catabolism used Agilent Bond Elut PPL SPE cartridges for analyte extraction. Published by Elsevier B. V.

Environmental

[Determination of 61 organic pollutants in drinking water by solid phase extraction followed by liquid and gas chromatography coupled to tandem mass spectrometry: an analytical strategy for a routine laboratory](#)

International Journal of Environmental Analytical Chemistry, **93**, 707-726 (2013)
Georgina Fortuny *et al.*

Tags
Bond Elut Plexa, Bond Elut PPL, Bond Elut ENV,
Bond Elut C18, VF-5ms, environmental, water
analysis

Abstract

A method for determination of 61 organic pollutants (polycyclic aromatic hydrocarbons and organochlorine, organophosphorus and organonitrogen pesticides) is proposed. It is based on solid phase extraction (SPE) and subsequent analysis of the extract by liquid and gas chromatography coupled to tandem mass spectrometry. Method validation yielded to the following values: limits of quantification, from 0.005 to 0.020 $\mu\text{g L}^{-1}$; trueness, 95% to 113% and reproducibility (as percent relative standard deviation), 2% to 15%. Additionally, the method performed well in various proficiency tests. ©2012 Taylor and Francis.

[Occurrence and distribution of benzothiazole in the Schwarzbach watershed \(Germany\)](#)

Journal of Environmental Monitoring, **13**, 2838-2843 (2011)
Elke Fries, Tilman Gocht, Jörg Klasmeier

Tags
Bond Elut PPL, DB-WAX, 6890N GC, environmental, emerging contaminants

Abstract

The authors used Agilent Bond Elut PPL as an analyte concentrator from a large volume of water for benzothiazole, with a check for breakthrough and analytical recoveries. Analysis was accomplished using an Agilent J&W DB-WAX column in an Agilent 6890 GC. Published by the Royal Institute for Chemistry.

[Determination of Dialkyl Phosphate Metabolites of Organophosphorus Pesticides in Human Urine by Automated Solid-Phase Extraction, Derivatization, and Gas Chromatography-Mass Spectrometry](#)

Journal of Analytical Toxicology, **32**, 721-727 (2008)
G. K. Hemakanthi De Alwis, Larry L. Needham, Dana B. Barr

Tags
Bond Elut PPL, DB-5ms, 6890 GC, 7683 Autosampler, 5973 MSD, environmental, water analysis

Abstract

In a continuation of prior work (De Alwis, Needham, and Barr, 2007), the authors optimized eluent conditions to ACN versus the initial diethyl ether, again using Agilent Bond EluPPI for SPE and an Agilent J&W DB-5ms GC column. Published by OUP.

[Automated Solid Phase Extraction and Quantitative Measurement of 2,3-Dibromo-1-Propanol in Urine Using Gas Chromatography-Mass Spectrometry](#)

Archives of Environmental Contamination and Toxicology, **53**, 134-139 (2007)
G.K. Hemakanthi De Alwis, Larry L. Needham, Dana B. Barr

Tags
Bond Elut PPL, DB-5ms, 6890 GC, 7683 Autosampler, 5973 MSD, environmental, emerging contaminants

Abstract

Agilent Bond Elut PPL performed best of all the SDVB methods tested. The authors provide their method, with relative recovery, precision intra/inter day, optimization and their reasons for choosing a non-polar SDVB for very polar compounds such as DBP and tris-BP. Published by Springer.

[Impact of wastewater treatment plant discharge of lidocaine, tramadol, venlafaxine and their metabolites on the quality of surface waters and groundwater](#)

Journal of Environmental Monitoring, **14**, 1391-1399 (2012)

Paola C. Rúa-Gómez, Wilhelm Püttmann

Tags

Bond Elut PPL, environmental, water analysis

Abstract

Agilent Bond Elut PPL was used for extraction of drugs as emerging contaminants in surface and waste water streams. Published by the Royal Society of Chemistry.

[Serum Vitellogenin Levels and Reproductive Impairment of Male Japanese Medaka \(*Oryzias latipes*\) Exposed to 4-tert-Octylphenol](#)

Environmental Health Perspectives, **107**, 385-390 (1999)

Suzanne Gronen *et al.*

Tags

Bond Elut PPL, environmental, emerging contaminants

Abstract

Sample prep to assess vitellogenin levels in Japanese medaka fish was accomplished using Agilent Bond Elut PPL cartridges. Published by the National Institute of Environmental Health Sciences.

[Selective serotonin reuptake inhibitors in sewage influents and effluents from Tromsø, Norway](#)

Journal of Chromatography A, **1115**, 187-195 (2006)

Terje Vasskog *et al.*

Tags

Bond Elut PPL, Bond Elut ENV, environmental, emerging contaminants

Abstract

Agilent Bond Elut PPL and Bond Elut ENV were used for sample prep in an investigation of selective serotonin reuptake inhibitors. Published by Elsevier B. V.

[Development of a solid phase extraction method for agricultural pesticides in large-volume water samples](#)

Talanta, **81**, 1380-1386 (2010)
Georges-Marie Momplaisir *et al.*

Tags
Bond Elut PPL, Bond Elut C18,
Bond Elut NEXUS, 6890A GC, 5973N MSD,
environmental, water analysis

Abstract

Agilent Bond Elut NEXUS in bulk, i.e. 8 g for a 100 L water sample, was used to extract pesticides from large volumes of water. Agilent Bond Elut PPL and Bond Elut C18 were also used. Published by Elsevier B. V.

[Improved extraction and clean-up of imidazolinone herbicides from soil solutions using different solid-phase sorbents](#)

Journal of Chromatography A, **1216**, 5092-5100
(2009)
Mohammadkazem Ramezani *et al.*

Tags
Bond Elut PPL, Bond Elut C18, Bond Elut SCX,
1100 Series, environmental, soil, sludges and
sediments

Abstract

The authors used a range of Agilent Bond Elut cartridges to improve extraction and cleanup of herbicides from soils. Bond Elut PPL was particularly effective. Published by Elsevier B. V.

[Simultaneous Determination of 12 Sulfonylurea Herbicides in Drinking Water after SPE by LC-DAD](#)

Chromatographia, **73**, 813-816 (2011)
Rainer Gallitzendörfer *et al.*

Tags
Bond Elut PPL, 1100 Series, environmental,
water analysis

Abstract

The authors used LC-DAD to analyze sulfonylureas in drinking water. Agilent Bond Elut PPL SPE gave cleaner backgrounds than other SPE, achieving ng/L recovery levels (ppt). Published by Springer.

[Solid-phase extraction combined with dispersive liquid–liquid microextraction-ultra pre-concentration of chlorophenols in aqueous samples](#)

Journal of Chromatography A, **1169**, 63-69
(2007)
Nazir Fattahi *et al.*

Tags
Bond Elut PPL, environmental, water analysis

Abstract

This well thought out method development study showed flow rate, sample breakthrough, sample pH, salt concentration, and elution solvent effect recoveries from Agilent Bond Elut PPL for sample prep. Published by Elsevier B. V.

[Seasonal fluctuations of organophosphate concentrations in precipitation and storm water runoff](#)

Chemosphere, **78**, 958-964 (2010)
Julia Regnery, Wilhelm Püttmann

Tags
Bond Elut PPL, environmental, water analysis

Abstract

The authors used Agilent Bond Elut PPL to extract and enrich analytes from water, rain, and melted snow samples. Published by Elsevier B. V.

[Development of a quantitative high-performance thin-layer chromatographic method for sucralose in sewage effluent, surface water, and drinking water](#)

Journal of Chromatography A, **1218**, 2745-2763
(2011)
Gertrud E. Morlock, Leonard Schuele, Sebastian
Grashorn

Tags
Bond Elut PPL, Bond Elut NH₂, ChemStation,
environmental, emerging contaminants

Abstract

Agilent Bond Elut PPL and Bond Elut NH₂ were chosen for the extraction and matrix removal for HPTLC of sucralose from various waters. Published by Elsevier B.V.

[Determination of two oxy-pyrimidine metabolites of diazinon in urine by gas chromatography/mass selective detection and liquid chromatography/electrospray ionization/mass spectrometry/mass spectrometry](#)

Journal of AOAC International, **83**, 1229-1238
(2000)

R. A. Yokley, N. Shen, M. W. Cheung

Tags

Bond Elut PPL, ZORBAX SB-CN, DB-WAX, 6890
GC, 5972 MSD, 1100 Series, environmental,
water analysis

Abstract

In a comprehensive investigation of diazinon in urine the authors used Agilent Bond Elut PPL SPE for sample cleanup, followed by HPLC with an Agilent ZORBAX SB-SN column with LC/MS/MS. GC/MS analysis was accomplished using an Agilent 6890 GC with 5972 MSD, equipped with an Agilent J&W DB-WAX column. Published by Ingenta.

[Glutaraldehyde in hospital wastewater](#)

Archives of Environmental Contamination, **42**,
137-144 (2002)

B. Jolibois, M. Guerbet, S. Vassal

Tags

Bond Elut PPL, CP-Sil 8 CB, environmental,
water analysis

Abstract

The authors report that a method using Agilent BE-PPL basic SPE was better for extracting polar glutaraldehyde in hospital waste water. They then used an Agilent J&W CP-Sil 8 CB GC column for analysis. Published by Springer B. V.

Food testing and agriculture

[Misleading measures in Vitamin D analysis: A novel LC-MS/MS assay to account for epimers and isobars](#)

Nutrition Journal, **10** (2011)
Iltaf Shah *et al.*

Tags

Bond Elut SI, Bond Elut Plexa, Bond Elut LMS, Bond Elut PPL, SampliQ OPT, SampliQ DVB, ZORBAX RRHD SB-C18, Ultron ES-OVM, food testing and agriculture, dietary supplements, natural compounds and additives

Abstract

Recently, the accuracies of many commercially available immunoassays for Vitamin D have been questioned. Liquid chromatography tandem mass spectrometry (LC- MS/MS) has been shown to facilitate accurate separation and quantification of the major circulating metabolite 25-hydroxyvitamin-D3 (25OHD3) and 25-hydroxyvitamin-D2 (25OHD2) collectively termed as 25OHD. However, among other interferents, this method may be compromised by overlapping peaks and identical masses of epimers and isobars, resulting in inaccuracies in circulating 25OHD measurements. The aim of this study was to develop a novel LC-MS/MS method that can accurately identify and quantitate 25OHD3 and 25OHD2 through chromatographic separation of 25OHD from its epimers and isobars. © The Authors.

[Analysis of free and bound phenolics in wine and grapes by GC–MS after automated SPE](#)

Analytical and Bioanalytical Chemistry **405**,
9869-9877 (2013)
David Allen *et al.*

Tags

HP-5ms Ultra Inert, Bond Elut PPL, Bond Elut Si, food testing and agriculture, food processing

Abstract

After extraction using Agilent Bond Elut sample prep cartridges, an Agilent J&W HP-5ms Ultra Inert GC column was used to separate phenolics in wine and grapes. Published by Springer.

www.agilent.com/chem

Agilent shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material. Information, descriptions, and specifications in this publication are subject to change without notice.

© Agilent Technologies, Inc., 2014

Printed in the UK
28 October, 2014

5991-3060EN

The Measure  of Confidence



Agilent Technologies