Cation Exchange HPLC Columns

PRP-X200

Polymeric cation exchange packing for separation of inorganic cations and organic cations.

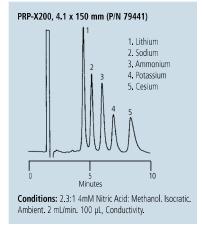
- Easily separate mono or divalent cations.
- pH stable from 1 to 13.

- Use with organic solvent up to 100% for elution of hydrophobic cations and column cleaning.
- Compatible with conductivity and UV detectors.

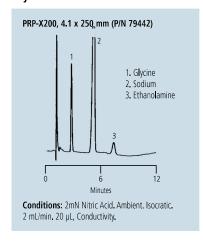


- One particle size: 10 μm.
- Available in stainless steel and PEEK hardware.
- Analytical and semiprep/preparative guard columns.

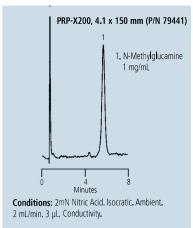
Monovalent Cations



Glycine and Ethanolamine



N-Methylglucamine



79127

79128

Ordering Information

* PEEK hardware

HELC COMMINIS		
I.D. x Length	10 µm	
1.0 x 50 mm		
1.0 x 100 mm		
1.0 x 250 mm		
2.1 x 150 mm	79394	
4.1 x 100 mm	79363	
4.1 x 150 mm	79441	

I.D. X Length	ιυ μm
4.1 x 250 mm	79442
4.6 x 50 mm*	
4.6 x 150 mm*	79384
4.6 x 250 mm*	79357
7.0 x 305 mm	
10.0 x 250 mm	

 $^{^{**}}$ Analytical guard column for steel columns is 2.3 x 20 mm *** Analytical guard column for PEEK columns is 3.0 x 8.0 m $\,$ * PEEK hardware

Starter Kits (1 holder, 1 cartridge)

Replacement Cartridges (2/pk)

Analytical Guard Columns For Steel Columns** For PEEK Columns*** Starter Kits (1 holder, 2 cartridges) 79456 79368 Replacement Cartridges (5/pk) 79449 79369 Semiprep/Preparative Guard Column For Steel Columns****

^{****} Semiprep/preparative guard column for steel columns is 4.6 x 20 mm

PRP-X400 Cation Exchange HPLC Columns

Polymeric cation exchange packing for separation of glyphosate and its metabolite in drinking water.

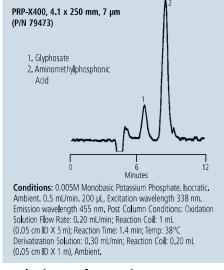
- Faster analysis when compared to competitor's columns.
- Detection levels of less than 10 ppb when using the post column, OPA derivatization technique.
- Applicable to other separations, such as inositol and sugar alcohols.



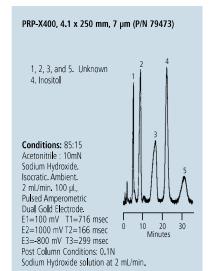
- Two particle sizes: 7 and 12-20 µm.
- Available in stainless steel and PEEK hardware.

• Analytical and semiprep/preparative guard columns.

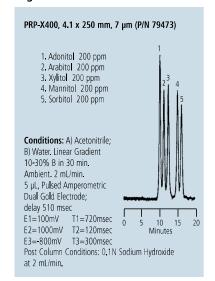
Glyphosate and Metabolite



Inositol in Vitamin Matrix



Sugar Alcohols



Ordering Information

HPLC Columns		
I.D. x Length	7 μm	12-20 μm
2.1 x 250 mm	79398	
4.1 x 150 mm	79717	
4.1 x 250 mm	79473	
4.6 x 250 mm*	79387	

*	PEEK hardware

Analytical Guard Column	For PEEK Columns**
Starter Kit (1 holder, 2 cartridges)	79376
Replacement Cartridges (5/pk)	79377
C18 Guard Column for EPA Glyphosate Application	For Steel Columns***
Starter Kit (1 holder, 2 cartridges)	79459
Replacement Cartridges (5/pk)	79452
PRP-X400 Semiprep/Preparative Guard Column	For Steel Columns****
Starter Kit (1 holder, 1 cartridge)	79131
Replacement Cartridges (2/pk)	79132

^{**} Analytical guard column for PEEK columns is 3.0 x 8.0 m

^{****} Analytical guard column for steel columns is 2.3 x 20 mm

**** Semiprep/preparative guard column for steel columns is 4.6 x 20 mm

PRP-X800 Cation Exchange HPLC Columns

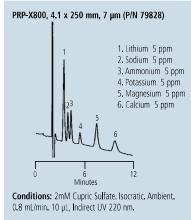
Polymeric cation exchange columns for the isocratic separation of mono and divalent cations.

- · Isocratic separation of lithium, sodium, ammonium, potassium, magnesium and calcium.
- Gradient separation of transition metals.
- **Excellent durability (stable to any concentration** of water or organic solvent).

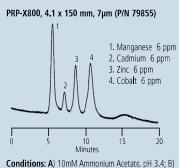


- One particle size: 7 µm.
- Available in stainless steel and PEEK hardware.
- Guard columns in 316 stainless steel and PEEK.

Mono and Divalent Cations

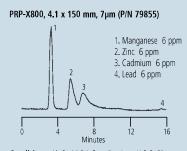


Transition Metals



Trifluoroacetic Acid in Water pH 1.5. Linear Gradient 15-35% B in 20 min, 1 mL/min, 100 µL, Post Column Reaction: 0.0125% 4-(2-pyridylazo)resorcinol in 5M Ammonium Hydroxide 0.5 mL/min. Visible 540 nm.

Transition Metals



Conditions: A). 2mM Ethylenediamine pH 3.2; B) 100mM Ethylenediamine pH 1.73. Linear Gradient 100% A (0-5 min.), 0-100% B in (5-20 min.) 1 mL/min, 100 µL, Post Column Reaction: 0.0125% 4-(2-pyridylazo) resorcinol (PAR) in 5M Ammonium Hydroxide, 0.5 mL/min. Visible 540 nm.

Ordering Information

HPLC Columns		
I.D. x Length	7 μm	
4.1 x 150 mm	79855	
4.1 x 250 mm	79828	

^{*} PEEK hardware

For Steel Columns** For PEEK Columns*** **Analytical Guard Columns** Starter Kits (1 holder, 2 cartridges) 79830 79831 79833 Replacement Cartridges (5/pk) 79832

Visit our HPLC Application Index at

http://www.hamiltoncompany.com/HPLC/applicationIndex.php for a complete list of compounds that have been separated on our columns.

Analytical quard column for steel columns is 2.3 x 20 mm.

^{***} Analytical guard column for PEEK columns is 3.0 x 8.0 mm

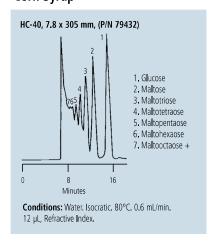
HC-40 Cation Exchange HPLC Columns

Polymeric 4% cross-linked soft-gel column for cation, ligand exchange separation of carbohydrates.

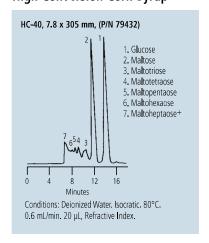
- Separate oligosaccharides up to DP8.
- Water mobile phase.
- Compatible with RI detectors.
- One particle size: 10 15 μm.



Corn Syrup



High Conversion Corn Syrup



Guard Columns	For Steel Columns*
Hydrogen Form Cation Exchange Starter Kit (1 holder, 1 cartridge)	79133
Hydrogen Form Cation Exchange Replacement Cartridges (2/pk)	79134
Carbonate Form Anion Exchange Starter Kit (1 holder, 1 cartridge)	79866
Carbonate Form Anion Exchange Replacement Cartridges (2/pk)	79865

^{*} HC-40 guard column for steel columns is 4.6 x 20 mm

HC-75 Cation Exchange HPLC Columns

Polymeric 7.5% cross-linked soft-gel columns for cation, ligand exchange separations of carbohydrates.

• Compatible with UV and RI detectors.

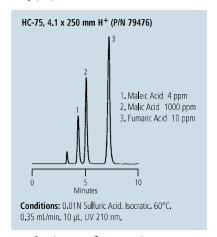
- Hydrogen form columns for USP L17 applications.
- Calcium form columns for USP L19 applications.
- Lead form columns for USP L34 applications.



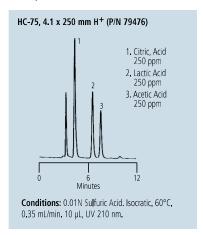
- One particle size: 9 μm.
- Available in stainless steel and PEEK hardware.

• Three forms: calcium, lead and hydrogen.

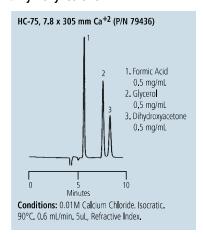
Malic Acid



Citric, Lactic and Acetic Acids



Dihydroxyacetone



Ordering Information

Gel-Type Cation Exchange Columns

I.D. x Length	9 μm, Calcium	9 μm, Lead	9 μm, Hydrogen	
4.1 x 250 mm	79431		79476	
7.8 x 100 mm			79547	
7.8 x 305 mm	79436	79438	79544	

Visit our HPLC Application Index at

http://www.hamiltoncompany.com/HPLC/applicationIndex.php for a complete list of compounds that have been separated on our columns.

Guard Columns	For Steel Columns*
Hydrogen Form Cation Exchange Starter Kit (1 holder, 1 cartridge)	79133
Hydrogen Form Cation Exchange Replacement Cartridges (2/pk)	79134
Carbonate Form Anion Exchange Starter Kit (1 holder, 1 cartridge)	79866
Carbonate Form Anion Exchange Replacement Cartridges (2/pk)	79865

^{*} HC-75 guard column for steel columns is 4.6 x 20 mm