CarboPac™ PA10
QuickStart

If you are new to CarboPac chromatography, see the other side.

System Validation

1. Program the ED40 detector (this is the pre-loaded waveform):

Time (seconds)	Potential (Volts)	Integration
0.00	+0.05	
0.20	+0.05	Begin
0.40	+0.05	End
0.41	+0.75	
0.60	+0.75	
0.61	-0.15	
1.00	-0.15	

For other detectors, refer to Section 3.7 "System Setup".

2. Wash the CarboPac PA10 column with 200 mM NaOH for at least 10 minutes at 1.0 mL/minute.

3. Equilibrate the CarboPac PA10 column with 18 mM NaOH for 15 minutes at 1.0 mL/minute.

4. Reconstitute the MonoStandards by adding 1.0 mL Reagent Grade Water.

5. Inject 10 µL of MonoStandards. Compare to Production Test Chromatogram (included).

	Operational Conditions	Typical Limits
Eluent pH Range	> pH 11	0 - 14
Flow Rate	1.0 mL/min	1.5 mL/min
Pressure (without guard, 18 mM NaOH, 1.0 mL/min)	1,400 - 1,600 psi (9.65 - 11.03 MPa)	4,000 psi (27.57 MPa)
Eluent Ionic Form	Hydroxide or Acetate	**Do not use HCl as an eluent with a gold electrode. HCl can be used as a clean-up solution. Methanesulfonic acid is recommended.**
NaOH Concentration (elution):	18 mM	
NaOH Concentration (wash):	200 mM	1 M NaOH
Detergents:	None	No anionic detergents
Operational Temperature:	Ambient	4 - 55 °C

A Message to New CarboPac Users...

The **Installation Instructions and Troubleshooting Guide** assumes that you have a basic knowledge of HPLC. CarboPac columns are high performance anion exchange (HPAE) columns that are optimized for pulsed amperometric detection (PAD). Chromatographers not familiar with HPAE-PAD should review the following:

Eluent Preparation. HPAE is sensitive to impurities in the NaOH eluent. The most common impurity is carbonate, which can be introduced through the air and from stock NaOH solutions. See Section 3.4, "Eluent Preparation", to minimize carbonate contamination.

Detector Settings. Proper settings for pulsed amperometric detectors vary by detector design and application. See Section 3.7.1, "Selecting the Optimal Detector Settings", for your specific DIONEX detector.

Method Development. For applications other than monosaccharide analysis, see Section 1.1, "Column Selection" and Section 4.2, "Analytical Conditions for Unknown Samples".