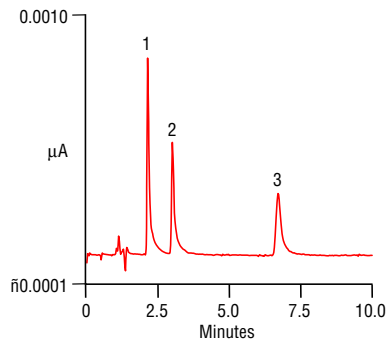


Benzidines by EPA Method 605 on Acclaim® 120 C18 with Electrochemical Detection



Column: Acclaim 120 C18, 3 μm
Dimensions: 2.1 × 100 mm
Mobile Phase: 50/50 acetonitrile/
100 mM NaOAc, pH 4.7
Flow Rate: 0.17 mL/min
Inj. Volume: 5 μL
Detection: Glassy carbon electrode, 800 mV

Peaks
1. Benzidine
2. 3,3'-Dimethylbenzidine
3. 3,3'-Dichlorobenzidine

Note: Scaling down the column size and flow rate produces a superproportional increase in sensitivity in the electrochemical detector.

20400

EPA Method 605 for benzidines in water uses electrochemical detection for its selectivity and good detection limits. These detection limits can be further improved by using a narrow-bore column at a reduced flow rate.