



Overview

The concentration of sodium bicarbonate was determined by the first derivative technique utilizing hydrochloric acid as the titrant. The Orion 960 Autochemistry System determines the endpoint and calculates the sample concentration.

Market	Food and Beverage	Species Measured	Sodium Bicarbonate
Sample	Food Mixes	Sample Size	0.20g
Technique #	6 First Derivative	Typical Concentration	0.2-2.0% w/w
Solutions	0.05671M hydrochloric acid. Fill solution 810007.		
Sample Prep	Weigh out 2g sample add to a 500mL volumetric flask, dilute w/ DI water. Stir well. Pipet 50mL into a 180mL beaker. Titrate.		

Statistics

of Trials 4 **Mean** 1.3605%w/w **%CV** 0.67 **Analysis Time** 3.7minute(s)

Comments Rinse the electrodes, stirrer, and dispenser probe between measurements with deionized water.

Method Parameters

Sample Volume/Weight	0.20 g	Timed or Stability Readings	10.0 mV/min stability
Constant Increment	0.195 mL	Number of Endpoints	1
Max Titrant Volume	1.50 mL	Desired Units	% w/w
Molecular weight	84.01 g	Predose	none
Prestir	60.0 second(s)	Additional Parameters	
Reaction Ratio	1.00		