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Potentiometric Titration Application Notes Applications Log # **656B**

Overview The concentration of salt in canned products was determined by the Orion 960 Titrator PLUS using first derivative technique and using 0.1 N silver nitrate as titrant.

Market	Food and Beverage	***Species Measured***	Chloride
Sample	Canned Products	***Sample Size***	0.45g
		Typical Concentration	6-7% NaCl w/w
Technique #	6 First Derivative	***Electrode***	Silver/Sulfide Half Cell Electrode 9416BN. Double Junction Electrode 900200

Solutions Inner/ Outer Fill Solution 900002/900003; 0.1M sodium chloride (NaCl) 941706; 0.1N Silver Nitrate.

Solutions preparation: For 0.1N AgNO3: Dissolve 16.986g of silver nitrate in deionized water and dilute to 1000 mL.

Titrant standardization Pipet 3.00 mL of 0.100 M standard sodium chloride solution (Orion 941706) into a beaker and add about 50 mL of deionized water. Titrate.

Sample Prep Mix sample well and weigh 50g. Blend the sample with 500g of deionized water for 1 min. Weigh 5g of mixture to a 150 mL beaker. Add 50 mL DI water to the same beaker. Titrate.

Statistics

# of Trials	3	***Mean***	6.66% w/w	***%CV***	0.02%	***Analysis Time***	10.0 minute(s).

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

Method Parameters

Sample Volume/Weight	0.5 g	***Timed or Stability Readings***	10.0 mV/min stability
Constant Increment	10.0 mV	***Number of Endpoints***	1
Max Titrant Volume	10.0 mL	***Desired Units***	% w/w
Molecular weight	58.50	***Predose***	none
Prestir	1.0 second(s)	***Additional Parameters***	
Reaction Ratio	1.00		