

Determination of 7 inorganic anions in soda



A smart sample prep with single degassing

INTRODUCTION

Determination of chloride, nitrate, nitrite, bromide, sulfate, phosphate, and fluoride anions in soda sample using Wyn-CE capillary electrophoresis system with indirect UV detection using a chromate-based electrolyte.

STANDARD AND REAL ANALYSIS

Buffer : Chromate + TTAOH (EOF modifier) + CHES + Ca-gluconate, pH 9.0.

Capillary : bare-fused silica, L = 60 cm, I = 52 cm, ID = 75 µm

Injection : hydrodynamic, 50 mbar, 3 s

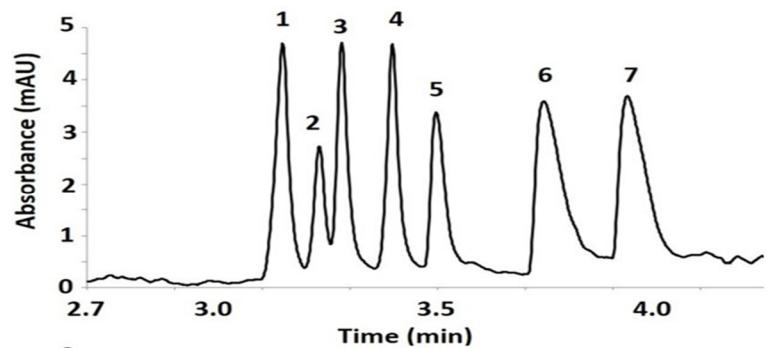
Voltage : -15 kV

Detection : 254 nm, indirect

Temperature : 25 °C

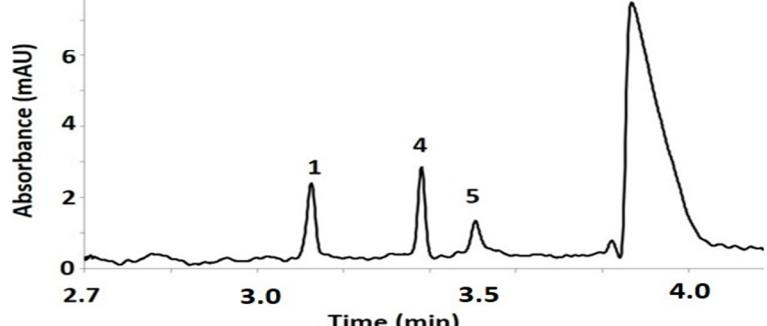
Standard sample :

1-chloride ; 2-bromide ; 3-nitrite ;
4-sulfate ; 5-nitrate ; 6-fluoride ;
7-phosphate. Concentration : 15 mg/L
(except Fluoride : 7 mg/L)



Cola sample :

(Dilution 1/8)
1-chloride (7 mg/L) ;
4-sulfate (8 mg/L) ;
5-nitrate (3 mg/l)
7-phosphate (430 mg/L)



Orange soda sample :

(Dilution 1/12)
1-chloride (5 mg/L) ;
4-sulfate (8 mg/L)
7-phosphate (207 mg/L)

