



# Determination of inorganic anions in drinking water samples (according to EPA6500 and ASTM D-6508-00)



*Fast analysis : 4 min*

## INTRODUCTION

Determination of chloride, nitrate, nitrite, bromide, sulfate, phosphate, and fluoride anions in drinking water samples 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 + Calcium gluconate, pH 9.0.

**Capillary :** bare-fused silica, L = 60 cm, l = 52 cm, ID = 75  $\mu$ m

**Injection :** hydrodynamic, 50 mbar, 3 s

**Voltage :** -15 kV

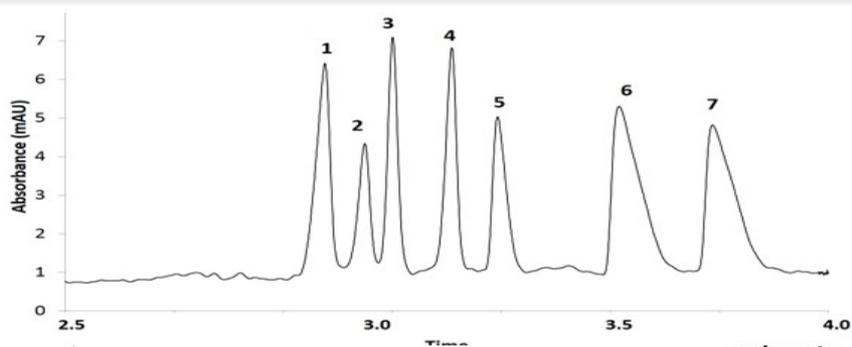
**Detection :** 254 nm, indirect

**Temperature :** 25 °C

### Standard sample :

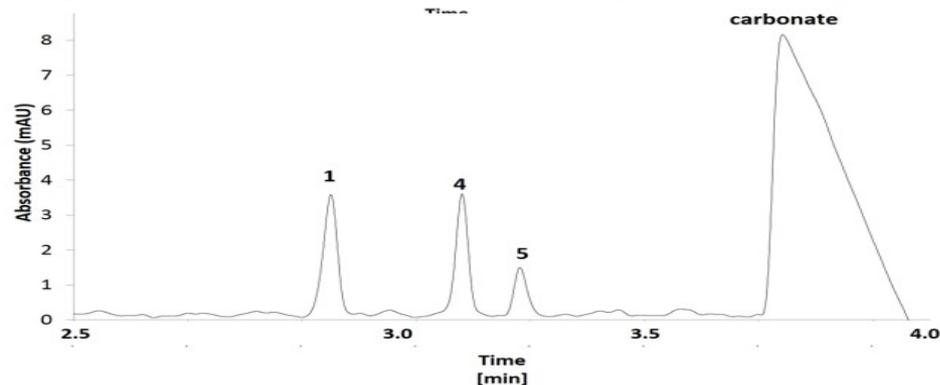
1-chloride ; 2-bromide ; 3-nitrite ;  
4- sulfate ; 5-nitrate ; 6- fluoride ;  
7- phosphate.

Concentration : 20 mg/L  
(except Fluoride : 10 mg/L)



### Tap water sample :

1-chloride (14 mg/L) ;  
4- sulfate (15 mg/L);  
5-nitrate (7 mg/l)



### Spring water sample :

1-chloride (65 mg/L) ;  
4- sulfate (7 mg/L)

