

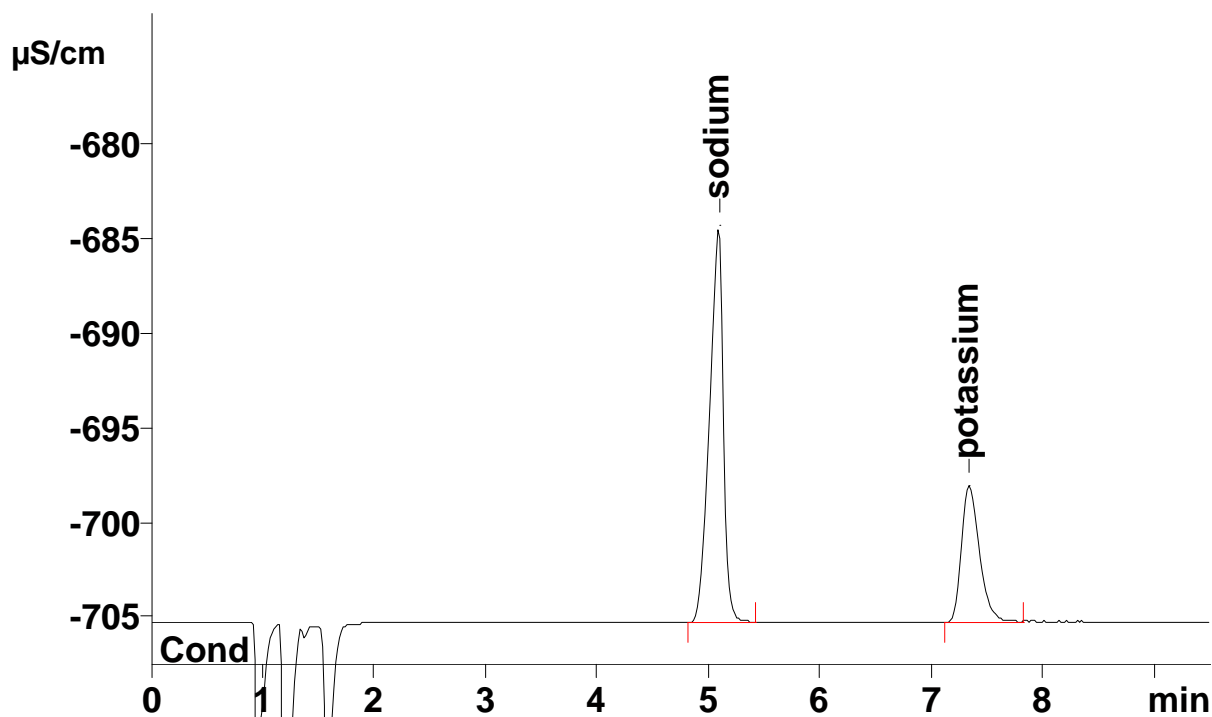
# IC Application Note No. C-116

**Title:** Sodium and potassium in toothpaste

**Summary:** Determination of sodium and potassium in toothpaste using cation chromatography with direct conductivity detection.

**Sample:** Toothpaste  
**Sample Preparation:** Dissolve 1.0 g of sample in 100 g eluent, subsequently dilute 12 mL of this solution up to 100 mL with eluent, injection after filtration (0.45 µm).

**Column:** 6.1050.420 Metrosep C 4 – 150  
**Eluent:** 1.7 mmol/L nitric acid  
 0.7 mmol/L dipicolinic acid  
**Flow:** 1.0 mL/min  
**Injection Volume:** 10 µL



<b>Results:</b>	Sodium	Potassium
In the diluted solution (mg/L)	26.01	22.34
In the toothpaste (%)	2.21	1.90