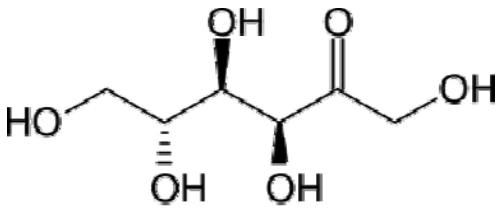
Fructose and Sodium Chloride (NaCl)



Fructose

Fructose and sodium chloride for injection is a sterile isotonic solution intended for slow infusion into the patients blood stream. It is Fluid replacement therapy for burned, trauma, infectious and post-operation patients needing replenishing fluid and calories but who have insulin resistance and are unsuitable for glucose therapy.

The current USP monograph for fructose and NaCl for injection uses angular rotation for fructose assay and titration with silver nitrate for sodium chloride.

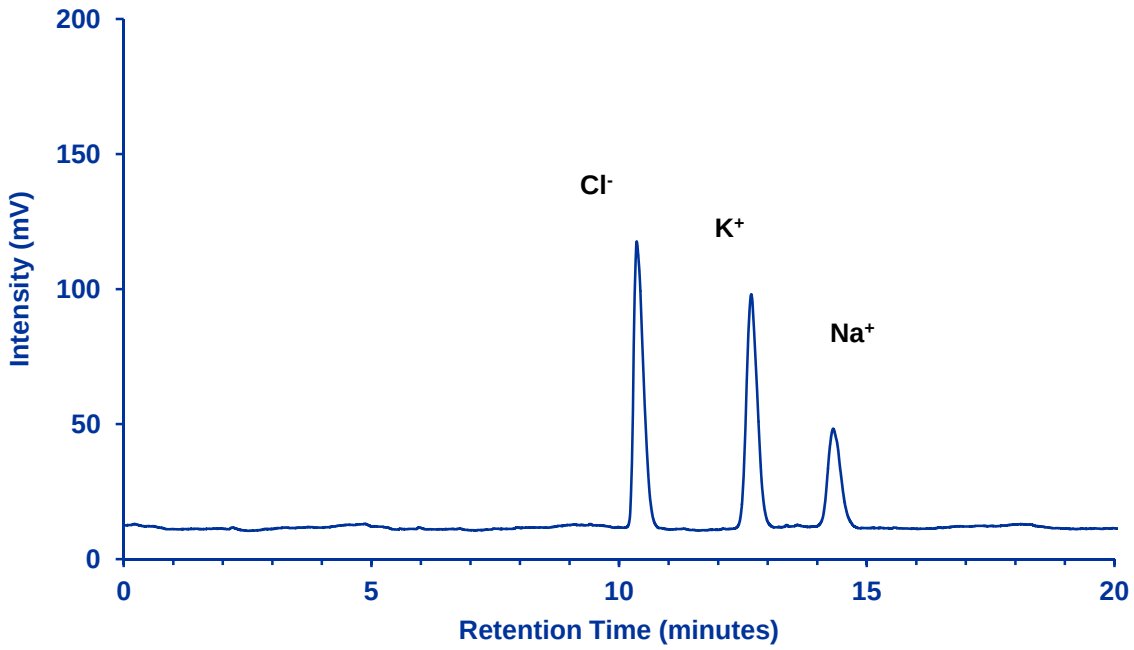
Using the presented HILIC method both fructose and NaCl can be quantified in a single chromatographic run with a cycle time below 10 minutes.

Sodium, Potassium and Chloride

SeQuant® ZIC®-pHILIC

Chromatographic Conditions

Column:	SeQuant® ZIC®-pHILIC, (5 µm) PEEK 150 × 4.6 mm,	1.50461.0001
Injection:	20 µl	
Detection:	Sedere Sedex 85 ELSD	
Cell:	Standard nebulizer	
Flow Rate:	1 mL/min	
Mobile Phase :	Buffer: Ammonium acetate 62.5mM pH 5. Mix Acetonitrile and Buffer80:20 (v/v) (Total ionic strength: 12.5mM).	
Temperature:	30°C	
Diluent	80/20 Acetonitrile/water	
Sample:	100 µg/mL KCl and 100 µg/mL NaCl	
Pressure Drop:	75Bar	



Chromatographic Data

No.	Compound	Retention Time (min)	k'	Asymmetry
1	Cl^-	10.4	4.2	1.7
2	K^+	12.7	5.3	1.2
3	Na^+	14.3	6.2	1.3