

# TK Concise Separations Ion Chromatography

The resins used by Concise Separations for the chromatography of inorganic ionic species (cations and anions) are composed of a macroporous co-polymer of polystyrene-divinylbenzene.

Those substituted with alkyl or alkyl quaternary ammonia are used for the separation of anions using carbonate type eluents. The resins substituted with sulphonic or carboxylic acids are used in the separation of cations employing acidic eluents.

- Polymeric substrate.
- Compatibility with organic solvents.
- High efficiency.
- Reproducibility.
- pH stability from 0 to 14.

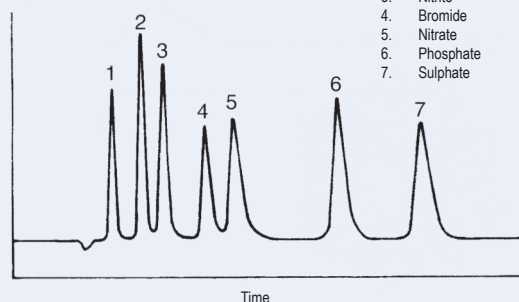
## Anions by E.P.A. Method 300.0(a)

### Conditions:

Column: ICSep AN300  
 Eluent: 1.7nM Sodium Carbonate, 1.8nM Sodium Bicarbonate  
 Flow rate: 2.0 mL/min  
 Detection: suppressed conductivity

### Sample:

1. Fluoride
2. Chloride
3. Nitrite
4. Bromide
5. Nitrate
6. Phosphate
7. Sulphate



TKL 1021

Transgenomic Column	Competitive Columns	Application
ICSepAN300	Dionex AS4A	F <sup>-</sup> , Cl <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , Br <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , HPO <sub>4</sub> <sup>2-</sup> , SO <sub>4</sub> <sup>2-</sup> , By E.P.A. Method 300.0(a)
ICSepANI	Dionex AS9-HC	F <sup>-</sup> , Cl <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , Br <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , HPO <sub>4</sub> <sup>2-</sup> , SO <sub>4</sub> <sup>2-</sup> , Low molecular weight, Organic acids in medium to high ionic strength matrices Cr(III), Cr(VI) as CrO <sub>3</sub> , CrO <sub>4</sub> <sup>2-</sup>
ICSepANSC	Dionex AS4A-SC	Polyvalent Phosphates, Arsenate, Sulfite Selenate, Arsenite, Selenite, F <sup>-</sup> , Cl <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , Br <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , HPO <sub>4</sub> <sup>2-</sup> , SO <sub>4</sub> <sup>2-</sup> , Low molecular weight, Organic acids
ICSepANISC	Dionex AS9-HC	F <sup>-</sup> , Cl <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , Br <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , HPO <sub>4</sub> <sup>2-</sup> , SO <sub>4</sub> <sup>2-</sup> , Low molecular weight, Organic acids in medium to high ionic strength matrices
ICSepAN2	Dionex AS14	Arsenate, Sulfite, Selenate, Arsenite, Selenite F <sup>-</sup> , Cl <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , Br <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , HPO <sub>4</sub> <sup>2-</sup> , SO <sub>4</sub> <sup>2-</sup> , Low molecular weight Organic acids
ICSepAN300B	Dionex AS9	F <sup>-</sup> , Cl <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , Br <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , HPO <sub>4</sub> <sup>2-</sup> , SO <sub>4</sub> <sup>2-</sup> , ClO <sub>2</sub> <sup>-</sup> , ClO <sub>3</sub> <sup>-</sup> , BrO <sub>3</sub> <sup>-</sup>
ICSepCN2	Dionex CS15	Li <sup>+</sup> , Na <sup>+</sup> , K <sup>+</sup> , Rb <sup>+</sup> , Cs <sup>+</sup> , Mg <sup>2+</sup> , Ca <sup>2+</sup> , NH <sub>4</sub> <sup>+</sup> , Cu <sup>2+</sup> , Ni <sup>2+</sup> , Zn <sup>2+</sup> , Co <sup>2+</sup> , Cd <sup>2+</sup> , Pb <sup>2+</sup> , Mn <sup>2+</sup> , Fe <sup>2+</sup> , Fe <sup>3+</sup>

## ICSep Ordering Information

Description	Cat.No.	Description	Cat.No.
ICSep AN2, 4.6mm x 250mm	TG-ANX-99-8515	ICSep AN2, 4.6mm x 250mm	TG-ANX-99-8515
ICSep AN2 Guard Column, 4.6mm x 50mm	TG-ANX-99-3515	ICSep AN300B, 4.6mm x 250mm	TG-ANX-99-8516
ICSep AN2 Guard Cartridges, 3/pk, 3.0mm x 10mm	TG-ANX-99-0015	ICSep AN300B Guard Column, 4.6mm x 50mm	TG-ANX-99-3516
ICSep AN1, 4.6mm x 250mm	TG-ANX-99-8511	ICSep AN300B Guard Cartridges, 3/pk, 3.0mm x 10mm	TG-ANX-99-0016
ICSep AN1 Guard Column, 4.6mm x 50mm	TG-ANX-99-3510	ICSep ANSC, 4.6mm x 250mm	TG-ANX-99-8512
ICSep AN1 Guard Cartridges, 3/pk, 3.0mm x 10mm	TG-ANX-99-0010	ICSep ANSC Guard Column, 4.6mm x 50mm	TG-ANX-99-3512
ICSep AN1-SC, 4.6mm x 250mm	TG-ANX-99-8514	ICSep ANSC Guard Cartridges, 3/pk, 3.0mm x 10mm	TG-ANX-99-0012
ICSep AN1-SC Guard Column, 4.6mm x 50mm	TG-ANX-99-3514	ICSep ION-120, 4.6mm x 120mm	TG-ANX-99-6550
ICSep AN1-SC Guard Cartridges, 3/pk, 3.0mm x 10mm	TG-ANX-99-0014	ICSep ION-120 Guard Kit, 4.0mm x 24mm	TG-ANX-99-2350
ICSep AN300, 5.5mm x 150mm	TG-ANX-99-7613	ICSep ION-120 Guard Cartridges, 3/pk, 4.0mm x 24mm	TG-ANX-99-0090
ICSep AN1 Guard Column, 4.6mm x 50mm	TG-ANX-99-3510	ICSep CN2, 3.2mm x 100mm	TG-CTX-99-5250
ICSep AN1 Guard Cartridges, 3/pk, 3.0mm x 10mm	TG-ANX-99-0010	ICSep CN2 Guard Cartridges, 2/pk, 3.0mm x 10mm	TG-CTX-99-1350
		ICSep CN2 FA, 4.6mm x 50mm	TG-CTX-99-3550
		ICSep CN2 Guard Cartridges, 2/pk, 3.0mm x 10mm	TG-CTX-99-1350