

## Ion Chromatography

Ion chromatography is an analytical technique employed to separate and identify ions present in a solution. A conductivity meter is a crucial instrument used in conjunction with ion chromatography to detect and measure the solution's conductivity.

Ion chromatography with a conductivity meter is particularly valuable for the analysis of inorganic ions, such as anions and cations. This technique is widely utilized in the chemical, environmental, pharmaceutical, and food industries to determine the ionic composition of solutions, ensuring accurate and sensitive assessment of the analysed samples.



### DIONEX INTEGRION HPIC SYSTEM

The Dionex Integrion HPIC System is an integrated platform proficient in executing all standard ion chromatography (IC) separations utilizing conductivity detection modes. Its integrated design ensures exceptional performance within a confined space, conserving valuable bench space and providing convenient access to all components for upgrades or maintenance.

Neutron Pharma excels in delivering high-performance anion analysis through advanced ion chromatography techniques. With state-of-the-art instrumentation and a commitment to precision, Neutron Pharma ensures accurate and reliable identification and quantification of anions in various samples.

**Comprehensive Anion Panel:** Our ion chromatography capabilities cover a wide range of anions, providing a comprehensive analysis of several pharmaceutical and chemical samples.

**Robust Methodology:** Neutron Pharma employs robust methodologies to handle complex matrices, ensuring the accuracy of results even in challenging sample environments.

**Accurate Quantification:** Through meticulous calibration and validation processes, we guarantee precise quantification of anions at varying concentration levels.

**Regulatory Compliance:** Neutron Pharma adheres to stringent regulatory standards, ensuring that our anion analysis meets the regulatory requirements of the pharmaceutical industry.

ANALYTICAL PORTFOLIO
Nitrites NO <sub>2</sub> - Nitrates NO <sub>3</sub> -
Chlorides Cl-
Bromides Br-
Fluorides F-

### Nitrates, Nitrites

The toxic potential of nitrites derives from their ability to bind to molecules showing nitrogen atoms (N) with which they can give rise to compounds called nitrosamines.

Nitrosamines are known carcinogenic compounds that, in recent years, are alarming both the food and pharmaceutical world (nitrosamine residues as contaminants of bees) and whose presence must be controlled.

### Chlorides, Fluorides, Bromides

These compounds described in the pathways of synthesis and by-products of reaction may reside at low levels as impurities in the final pharmaceutical substance.

Choosing Neutron Pharma guarantees not only the highest analytical standards but also a commitment to delivering actionable insights crucial for pharmaceutical research, development, and quality assurance.

Contact us for more information and receive a dedicated proposal.

#### References:

1. Chemsafe NITRITI, NISTRATI E NITROSAMINE: UN PROBLEMA ALIMENTARE E FARMACEUTICO
2. Cloruri, Floruri, Bromuri, Regulatory Toxicology and Pharmacology
3. DIONEX INTEGRION HPIC SYSTEM TFS-Assets\_CMD\_manuals\_Man-22153-97003-IC-Integrion-Man2215397003-EN (1)

Neutron, part of the Cotecna Group, is a global player in analytical services on food and feed products, supplements, materials in contact with food (FCM), cosmetics, and pharmaceutical products.



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