Cadmium (Cd)

Method - ISE

The standard known addition (SKA) technique is used to perform the analysis. During the process, two readings are done. The difference between both and the slope found during calibration are used to calculate the concentration. Possible changes on the matrix sample are corrected due to this both lectures, as the reference to calculate the result is the relative difference of mV and not the absolute values. This avoids external interferences.

Principle of measurement

ISA solution is added to prepare the sample and to activate the sensor element. After that, a first measurement is done. Subsequently, a small volume of a high concentrated nitrate solution is added. Finally, a second lecture of mV takes place to calculate the result. When the extracting solution is used, a cleaning solution of ammonia is needed after each analysis to eliminate cross-contamination.

Advantages of the method

The technique used by Instran to measure parameters when ISE sensor is required permits to avoid interferences or bad results due to matrix sample changes as thoses changes are corrected.

Specifications

Range: From 0.05 to 1ppm / 5ppm / 10ppm / 100ppm. Adjustable higher concentrations with internal dilution.
Accuracy: ±2% Full Scale
Repeatability: ±2%
Resolution: 0.01 ppm or 0.1 ppm
Analysis time: around 12 minutes
Calibration: one point
ISE: Cadmium Cd electrode

Reagents consumption

- Reagent 1: 0.5 ml / analysis — 0.5L / month
- Reagent 2: 0.5 ml / analysis — 0.5L / month

Monthly consumption calculated assuming 1 analysis per hour.

Visit our web

Instru | INSTRUMENTACIÓN ANALÍTICA Instran®

Solutions
for those
moving the world

www.instran.net

Instru office
c/ Penedés, 46
08820 El Prat de Llobregat
Barcelona • Tel.+34 934 787 161
instran@instran.net
c.salinas@instran.net

Instran®

Cadmium (Cd)

On-line Analyzer
Water quality parameters

We offer you all the solutions you need to keep moving the world forward