



Fluoride Analyzer



Instrumentation details:

Make: Hanna instruments, Japan.

Model: Fluoride ion selective electrode HI 4110, HI 4010.

Specifications:

Parameter		Fluoride
Type		Solid-state; Combination
Measurement Range		1M to 1×10^{-6} M Sat. to 0.02 (ppm)
Optimum pH Range		5 to 8
Temperature Range		0 to 80 °C
Body O.D.		12 mm
Insertion Length		120 mm
Body Material		PEI/epoxy
Connector		BNC
Possible Applications	:	Determination of free fluoride in potable water, soft drinks, wine, plants, emulsified food products, plating and pickling acids



The Hanna HI 4010 and HI 4110 are ion selective electrodes designed for the measurement of fluoride ions in aqueous solutions. The HI 4010 is a solid state half-cell sensor that requires a separate reference. The HI 4110 is a combination ion selective electrode. The HI 4010 or HI 4110 electrode functions as a sensor or ionic conductor. The HI 4010 requires a separate reference electrode to complete its electrolytic circuit. The HI 4110 has a reference electrode incorporated in its design. The lanthanum fluoride crystalline pellet is practically insoluble in the test solutions being measured and produces a potential change due to changes in the sample's ion activity. When the ionic strength of the sample is fixed, the voltage is proportional to the concentration of fluoride ions in solution and the electrode follows the Nernst equation.

Contact us:

Faculty in charge: Dr. Mahaveer kurkuri

E-mail: mahaveer.kurkuri@jainuniversity.ac.in

Contact no: +91 9449293499