



IntelliCAL™ Nitrate ISE Analysis Package

Product #: ISENO3181AP

The IntelliCAL[™] Nitrate ISE Analysis Package contains the IntelliCAL ISENO318101 Nitrate ISE, 100 pack of nitrate ISA powder pillows (2984799), 500 mL of 1.0 mg/L nitrogen-nitrate standard solution (204649), 500 mL of 10 mg/L nitrogen-nitrate standard solution (194749).

IntelliCALTM ISENO3181 is a digital, combination nitrate ion selective electrode (ISE) with a non-refillable, double junction reference and built-in temperature sensor. The IntelliCAL ISENO3181 probe is available with a 1 or 3 meter cable and is intended for laboratory use. The ISENO3181 is ideal for measuring nitrate concentrations in wastewater, drinking water and general water quality applications. The ISENO3181's solid-state sensor design eliminates membrane replacement and allows for dry storage of the ISE.

Utilizes a unique solid-state sensor technology that eliminates costly membrane replacements.

Traditional PVC-membrane ISEs require membrane replacement every 2-3 months. The IntelliCAL ISENO3181 Nitrate ISE's unique solid-state sensor technology eliminates the need for frequent membrane replacement by using a solid gel ion exchange behind the ion-selective membrane versus the liquid ion exchange used in most ISEs. This design allows users to get up to 2 years of life from their ISE without membrane replacement – saving the time and costly expense of frequently exchanging membranes.

Requires virtually no maintenance

The solid-state sensor design allows for DRY storage of the ISE without a shelf life. Also, the probe does not require the electrolyte to be refilled or membrane replacement.

Fast, stable, and accurate results

IntelliCAL digital probes lock on the result when the measurement is stable, removing the guesswork in having a moving number. Additionally, the probe's large annular reference junction provides maximum surface area between sample and reference electrolyte for fast measurement stability. And the solid-state sensor design doesn't allow the membrane to flex or undergo surface area changes, leading to more stability in results over a variety of samples.

Ultimate traceability in measurement history

Stored time and date stamp for each measurement, operator and sample ID, calibration history, parameter, and probe serial number

Can be moved between meters without the need to re-calibrate or re-enter measurement settings

Ideal for a multi-user environment with multiple HQd series Laboratory and Portable meters

Specifications

Cable Length:	1 m
Diameter:	12 mm

Dimensions (D x L): 12 mm x 220 mm

Filling Solution: Non-refillable driTEK gel

ISA Required: 2984799

Junction: Porous PTFE Annular Ring

Length: 220 mm

Material: Sensor Body: Epoxy

Parameter: Nitrate
Probe Type: Standard

Sensor Type: Solid-state PVC membrane

Special Feature: Dry storage & fast response time. No replacement membranes.

Temperature Range: Continuous use: 0 to 50 °C

What's in the box?

Kit includes: IntelliCAL ISENO3181 combination Nitrate ISE (no. ISENO318101), three Hach nitrate standard solutions (1.0 mg/L (500 mL, no. 204649), 10 mg/L (500 mL, no. 30749), and 100 mg/L (500 mL, no. 194749)), Hach nitrate ionic strength adjustor (ISA) Powder Pillows (pack of 100, no. 2984799), and ISE Basic User Manual.