Vol.4: Chemical Contents Check for Liquid Fertilizer Control



Quick and Easy Water Quality Check with the LAQUAtwin Series

LAQUAtwin is a series of compact water quality testers. Using Ion Selective Electrode (ISE) technology, they are available for Electrical Conductivity (EC), Calcium ion, Nitrate ion, Potassium ion, Sodium ion, Salt concentration and pH measurement. Using just a single drop of sample, the LAQUAtwin proprietary flat sensors can quickly and accurately measure the values of the chemical parameters at the production site.

On-site Ion Contents Check with the LAQUAtwin Series

Ion concentration of liquid fertilizer is measured generally by Ion Chromatograph (IC), Atomic Absorption Spectrophotometry (AA) or Inductively-coupled Plasma Emission Spectrometry (ICP). These instruments are expensive and require a fair amount of time for measurement preparation. LAQUAtwin series is an ideal tool to measure ion concentration of liquid fertilizer easily on-site. The following table compares the ion measurement between IC and the LAQUAtwin series.

As a result, the LAQUAtwin series shows strong correlation with IC, which makes it an ideal tool for rapid on-site measurement.

Nitrate ion, Potassium ion, Calcium ion, Sodium ion Measurement

Measurement data of 500 times dilution liquid fertilizer by LAQUAtwin

Measurement items	Measurement data by IC	Measurement data by LAQUAtwin	Error of Each Measurement Data to IC*1
NO3-	132.5 ppm	140 ppm	within ±10 %
K+	128.6 ppm	120 ppm	within ±10 %
Ca ⁺	69.8 ppm	65 ppm*2	within ±10 %
Na ⁺	4.2 ppm	7 ppm*3	

- ¹ ...The error may become larger for extremely contaminated samples
- ² ...Measurement data of 10 times dilution liquid fertilizer
- *3 ...This value is for reference because it is out of measurement range

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Compact Water Quality Meter

QUAtwin

pH, conductivity, ions and salt concentration. 7 parameters, 11 models.

Seven water quality parameters are available to suit your purpose, such as pH, conductivity, concentration of ion (Na*, K*, NO3⁻, Ca2+) and salt concentration. Incorporating the same principle as the laboratory sensors, LAQUAtwin will provide a reliable measurement.

Calibrate and measure at the touch of a button – the Smiley face will tell you when the result can be read

Easy operation for both the measurement and indispensable calibration procedure. Read the data once a smiley face lights up.

LAQUAtwin is fully waterproof and dustproof * (IP67 rated) The meter and sensor are fully waterproof so you can take it anywhere. No worries when water splashes during measurement or cleaning.

* IP67 rated. Will withstand immersion for 30 minutes at 1 m. Not suitable for underwater use.

Carrying case comes standard for handy portability

The compact carrying case contains everything you need for your measurements, including the standard solution. Ready to measure only with carrying case, it's a your laboratory ! You can attach a strap or tag on the strap hole.







Immersion When you're in the lab, you can test the sample in a beaker. Ensure the senso guard sliding cap is open.

01



02 | Scoop Use as a scoop to test water, for examp rom a rive



04 03 | Drops LAQUAtwin meters can measure sample volumes as low as 0.05 mL ^{*2}. Place a drop volumes as low as 0.05 mL ^{*2}. Place a drop the sample onto the sensor with a pipette.



One meter. Six different methods.

Chose the best method according to your sample, your situation and your needs.

Only the LAQUAtwin range allows you to be this flexible!

05 Foods containing some moisture can be ested by placing a small piece directly onto the senso



Powders

LAQUAtwin meters can also test dry powders. Simply place the powder sample onto the sensor, and drop on your defined volume of pure water



06 Paper and textiles

To test sheets of paper and textiles, cut up the sample into small pieces and place directly onto the sensor. Drop on your defined volume of pure water.



http://www.horiba.com/laquatwin

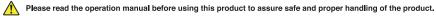
Benchtop pH/Water Quality Analyzer AQL







HORIBA Group is operating Integrated Management System(IMS) ISO9001 JQA-0298 / ISO14001 JQA-E-90039 / ISO13485 JQA-MD0010 / OHSAS18001 JQA-OH0068



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