iCheck lodine Product Information

iCheck **lodine** is a portable photometer for the quantitative determination of iodine in salt.

HOW DOES IT WORK?

iCheck consists of 2 parts: a ready-to-use reagent vial and a device. The sample is injected into the reagent vial where a reaction with iodine takes place. The vial is inserted into the device that measures concentration of lodine in the vial.







1. Injection 2. Reaction

3. Measurement

PRODUCT DETAILS





iCheck lodine quantitatively measures potassium iodate specific color reaction between the salt and the reagents in the test vials, and displays the results in mg/L. iCheck devices come in a portable case with all necessary accessories.





iCheck reagent vials contain a patented mixture of reagents. They come in a box (**Test Kit**) sufficient for 100 analyses. The reagent's shelf-life is 12 months at room temperature.



BENEFITS

- Speed: result in less than 10 minutes
- **Economy:** cost is only 10% of conventional lab. methods
- Easy implementation: only 1 day training required
- Scalability: no set up calibration required

OUR SERVICES

Free-of-charge customer tech support:

- Online demos and trainings (i.e. Zoom)
- Instant support via WhatsApp: +49 3328 35150034
- Support with analysis, calculations, interpretation of standards, sampling protocols, technical consultations about the micronutrients

On-site Training

Feasibility testing for new matrices

iChecks are manufactured in Germany, used in over 80 countries and validated against standard laboratory methods. Learn more at www.bioanalyt.com/products





iCheck lodine

Technical Data

Quality assurance

iCheck and iCheck lodine reagent vials are produced according to quality management system (DIN EN ISO 9001:2015) certified by TÜV Nord in Germany.

TECHNICAL DATA Sample	
Sample:	Table salt
Sample preparation:	Dilution in distilled or bottled water
Sample volume per analysis:	1.0 mL (1000 μL)
Concentration range:	>3 ppm (mg/kg), samples must be diluted in water; minimum dilution factor is 1:3
Device	
Analytical method:	Photometric determination of iodine concentration using colorimetric reaction
Units displayed:	mg/L
Linear range:	1.0 - 13.0 mg/L
Calibration:	Factory set (standards included for control)
Time per analysis:	< 10 min
Environment:	20 – 30°C, no direct sunlight
Accuracy:	Maximum coefficient of variation is 8%; extended measurement uncertainty at 95% confidence at 25°C is 17%.
Method comparison:	lodometric titration
User training:	1 day training
Use:	Laboratory and field
Data output:	Sample #, Batch #, Result, Date, Time (in transferred data)
Connectivity and data:	Results are stored in the device and transferred to a PC via USB
Power source:	NiMH rechargeable batteries included; AA 1.2 or 1.5V
Warranty:	2 years
Device weight:	0.45 kg
Device dimensions:	11 x 4 x 20 cm (W x H x L)
Test Kit	
Content:	100 reagent vials and 20 additive vials; 120 syringes - 1.0 mL; 120 needles - 0.8mm x 16mm
Chemical composition:	Starch, potassium iodide, phosphoric acid
Volume per reagent vial:	1.9 mL
Shelf life:	12 months at 20 –30°C, no direct sunlight, upright
Dimension of test kit:	26 x 14.5 x 16.5 cm
Disposal instructions:	Non-hazardous waste
Optional equipment:	50 mL falcons, weighing dishes, reference samples



