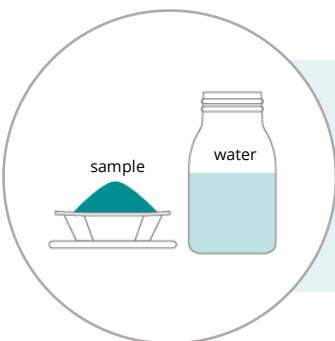


iCheck Iodine

How to use iCheck Iodine Test Kit to Measure Iodine in Salt

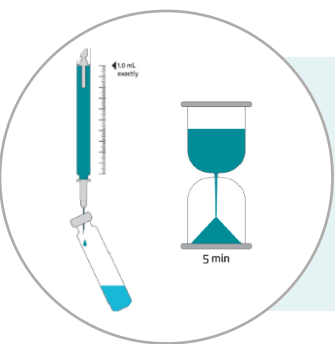
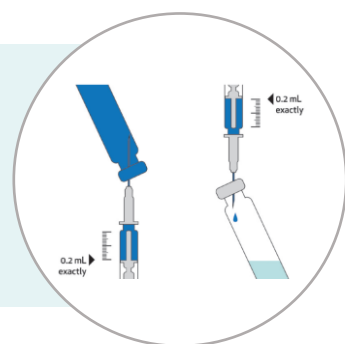


Step 1. Sample Preparation

- Dilute your sample with distilled or bottled water. The expected concentration in your diluted sample should be in the middle of iCheck Iodine linear range [1 to 13 mg/L].
- Control your iCheck Iodine device following the instructions in the iCheck Iodine User Manual provided with your iCheck case.

Step 2. Activate the Reagent vial with ADDITIVE

- Use small 1 mL syringe and thin green needle provided in your test kit box.
- Through red rubber septum take up 0.2 mL of ADDITIVE solution while holding the vial upside down. Make sure there are no air-bubbles trapped inside the syringe.
- Inject 0.2 mL ADDITIVE into a reagent vial to activate it. Shake the vial for 10 seconds.

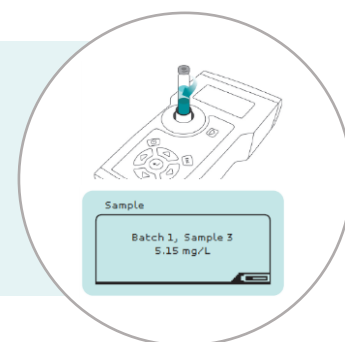


Step 3. Sample Injection & Reaction

- Shake the sample solution to homogenize and take up full syringe.
- Place the needle on syringe and adjust the volume to exactly 1.0 mL and inject into the activated Iodine reagent vial.
- Invert the vial with injected sample 5 times and let it stand for 5 minutes.

Step 4. Measurement and calculation

- Measure the vial in your iCheck Iodine following the instructions in your iCheck Iodine User Manual.
- Multiply your result with your dilution factor:
 - Dilution Factor (DF) = Total Diluted Sample Volume [mL] / Sample [g]
 - Iodine in the sample [mg/kg] = iCheck Iodine Result [mg/L] x DF



iCheck Iodine Calculations

- iCheck Iodine measurement range is 1.0 – 13 mg/L. If your sample is above this range you need to dilute it.
- Examples:

Expected Concentration of Iodine in Salt	Recommended Dilution Factor	Weight of Salt	Final Volume of Diluted Sample	Expected Concentration of Iodine in Diluted Sample
3 – 10 ppm	1 : 3	33 grams	100 mL	1 - 3 mg/L
10 – 20 ppm	1 : 5	20 grams	100 mL	2 – 4 mg/L
30 – 70 ppm	1 : 10	10 grams	100 mL	3 – 7 mg/L
80 – 100 ppm	1 : 20	5 grams	100 mL	4 – 5 mg/L

- Dilution Factor (DF) = Total Diluted Sample Volume [mL] / Sample [g]
- Measured Iodine [mg/kg] = iCheck Iodine Result [mg/L] x DF

Attention

- Potassium iodate (NOT potassium iodide) iodized samples can be measured with iCheck Iodine (NOT potassium iodide).
- For more information contact support@bioanalyt.com or WhatsApp +49 332835150034.
- References:
 - 2012_Rohner Validation of a user-friendly and rapid method for iodine_FNB
 - 2015_Rohner et al._Comparative validation of 5 iodine quantitative rapid test kits_PLOS one
- Store reagent vials upright at room temperature (20-30°C)

For the information on the accuracy of the result with iCheck please refer to the Performance Guide.