

Instruction Manual

HI 3832 Iodine Test Kit


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Dear Customer,

Thank you for choosing a Hanna Product.

Please read the instructions carefully before using the chemical test kit. It will provide you with the necessary information for correct use of the kit.

Remove the chemical test kit from the packing material and examine it carefully to make sure that no damage has occurred during shipping. If there is any noticeable damage, notify your Dealer or the nearest Hanna office immediately.

Each kit is supplied with:

- 1 color comparator cube;
- Reagent 1 (30 mL);
- Reagent 2 (20 mL).

Note: Any damaged or defective item must be returned in its original packing materials.

SPECIFICATIONS

| | |
|--------------------|------------------------------|
| Range | 0 to 2.5 mg/L (ppm) Iodine |
| Smallest Increment | 0.5 mg/L (ppm) Iodine |
| Analysis Method | Colorimetric |
| Sample Size | 25 mL (average) |
| Number of Tests | 50 (average) |
| Case Dimensions | 220x145x55 mm (8.7x5.7x2.1") |
| Shipping Weight | 180 g (6.7 oz.) |

SIGNIFICANCE AND USE

Iodine may be used as a disinfectant in drinking and swimming pool waters. Unlike chlorinated pools, water treated with iodine decrease eye irritation among swimmers and provides a disinfectant more stable to adverse conditions. However, iodine levels in the water must be frequently checked to maximize its given purpose.

The Hanna Iodine Test Kit employs a color cube to determine the iodine content in water. The kit is compact and is practical for field use. No chlorine or bromine can be present in the water sample for this test to work properly.

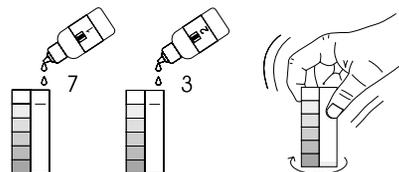
CHEMICAL REACTION

The iodine is measured by a colorimetric method. The sample is initially treated with a phosphate buffer to a pH of approximately 6.3. The addition of DPD (N,N-diethyl-p-phenylenediamine) is immediately oxidized by iodine producing a reddish color. The color intensity of the solution determines the iodine concentration.

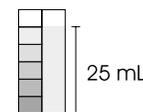
INSTRUCTIONS

READ THE ENTIRE INSTRUCTIONS BEFORE USING THE KIT

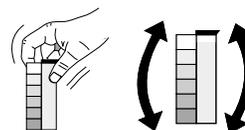
- Add 7 drops of Reagent 1 and 3 drops of Reagent 2 in the color comparator cube and mix by carefully swirling the cube in tight circles.



- Fill the color cube with water sample to the 25 mL mark.



- Cap and invert several time to mix.



- Determine which color matches the solution in the cube and record the results as mg/L (or ppm) iodine.



REFERENCES

Standard Methods for the Examination of Water and Wastewater, 16th Edition, 1985.

HEALTH AND SAFETY

The chemicals contained in this kit may be hazardous if improperly handled. Read Health and Safety Data Sheet before performing this test.