HI 96712

Aluminum Portable Photometer

- **CAL CHECK™**
- **User calibration**
- **Certified calibration and verification standards**
- **BEPS** (Battery Error Prevention System)
- **TIMER function**
- **Auto shut-off**
- **GLP Features**

Aluminum is the most abundant metal and the third most abundant element in the Earth's crust, behind only oxygen and silicon. It is a lightweight, silvery metal, familiar to every household in the form of pots and pans, beverage cans, and aluminum foil. It is nontoxic, corrosion resistant, non-magnetic, and easy to form or cast into a variety of shapes. It is one of the most useful metals we have.

In spite of the fact that aluminum is very active chemically, it does not corrode in moist air the way iron does. Instead, it quickly forms a thin, hard coating of aluminum oxide.

Aluminum is used in water purification because when it reacts with lime (or any base), it forms a sticky precipitate of aluminum hydroxide that sweeps out tiny particles of impurities.

HI 96712 measures the aluminum content in water and wastewater in the 0.00 to 1.00 mg/L range.

The meter uses an exclusive positive-locking system to ensure that the cuvette is in the same place every time it is placed into the measurement cell.

Many food-packaging materials and shiny plastic novelties are made of paper or plastic with an evaporated coating of bright aluminum.

In fact, cooking even weakly acidic foods such as tomatoes in an aluminum pot can dissolve enough aluminum to give the dish a "metallic" taste. Aluminum also dissolves in strong bases such as sodium hydroxide, commonly known as lye. Most oven cleaners, which are designed to work on steel and porcelain, contain sodium or potassium hydroxide, in which case, it is in the user's best interest to refrain from handling the aluminum parts of the cookware. Some commercial drain cleaners contain lye mixed with shavings of aluminum metal.

SPECIFICATIONS	HI 96712 Aluminum
Range	0.00 to 1.00 mg/L (ppm)
Resolution	0.01 mg/L (ppm)
Accuracy @ 25°C (77°F)	±0.02 mg/L ±4% of reading
Light Source	tungsten lamp
Light Detector	silicon photocell with narrow band interference filter @ 525 nm
Power Supply	9V battery
Auto-off	after ten minutes of non-use in measurement mode; after one hour of non-use in calibration mode; with last reading reminder
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing
Dimensions	192 x 104 x 69 mm (7.6 x 4.1 x 2.7")
Weight	360 g (12.7 oz.)
Method	adaptation of the aluminon method

The reagents are in powder form and are supplied in packets. The amount of reagent is precisely dosed to ensure maximum repeatability.

ORDERING INFORMATION

HI 96712 is supplied with sample cuvettes (2) with caps, 9V battery and instruction manual.

CAL CHECK™ standards and testing reagents sold separately

REAGENTS AND STANDARDS

HI 96712-11 CAL CHECK™ standard cuvettes
HI 93712-01 Reagents for 100 tests
HI 93712-03 Reagents for 300 tests

For a complete list of Reagents, see Reagents *Section 18*.