

HI97704

Hydrazine Portable Photometer

- **Advanced LED optical system**
 - Innovative optical design that utilizes a reference detector and focusing lens to eliminate errors from changes in the light source and from imperfections in the glass cuvette.
 - LEDs have a much higher luminous efficiency, providing more light while using less power. They also produce little heat, which could otherwise affect electronic stability.
- **CAL Check™**
 - Validate instrument performance at any time using CAL Check cuvettes made with NIST traceable standards. The CAL Check screen guides the user step-by-step through the validation process and user calibration.
- **On-screen tutorial mode with animations**
 - Guides users step-by-step through the measurement process
- **Waterproof and floating IP67 case**
- **Unit of measure is displayed along with reading**
- **Built-in timer**
 - Built-in reaction timer that ensures consistency between tests.
- **Error messages on display**
 - Alerts to problems including no cap, high zero, and standard too low
- **GLP data**
 - Displays the last calibration date.
- **Auto logging**
- **Battery status indicator**
- **Auto-shut off**

Significance of Use

Hydrazine is a liquid chemical substance normally used in high pressure heating plants because of its properties as an oxygen inhibitor, helping to avoid scaling and corrosion. Hydrazine reacts with dissolved oxygen to yield nitrogen and water; this is an advantage over sulfite treatment because it does not produce any dissolved solids in the boiled water. Hydrazine is also used as an energy source in fuel elements, as a reducing agent for metal recovery, and as an intermediate in the production of insecticides, herbicides, pharmaceuticals, and many other chemical products.



Specifications	HI97704 Hydrazine	
Measurement	Range	0 to 400 µg/L (ppb) (as N ₂ H ₄)
	Resolution	1 µg/L
	Accuracy @25°C (77°F)	±4% of full scale
Measurement System	Method	adaptation of the ASTM Manual of Water and Environmental Technology, method D1385-88 for natural and treated water
	Light Source	light emitting diode
	Bandpass filter	466 nm
	Bandpass filter bandwidth	8 nm
	Bandpass filter wavelength accuracy	±1.0 nm
	Light Detector	silicon photocell
Additional Specifications	Cuvette type	round 24.6 mm diameter (22 mm inside)
	Auto logging	50 readings
	Display	128 x 64 pixel B/W LCD with backlight
	Auto-off	after 15 minutes of inactivity (30 minutes before a READ measurement)
	Battery type / Life	alkaline 1.5 V AA (3) / > 800 measurements (without backlight)
	Environment	0 to 50°C (32 to 122°F); 0 to 100% RH, non-serviceable
	Dimensions	142.5 x 102.5 x 50.5 mm (5.6 x 4.0 x 2.0")
Weight	380 g (13.4 oz.)	
Ordering Information	HI97704 is supplied with sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), instrument quality certificate, and instruction manual. CAL Check standards and testing reagents sold separately	
	HI97704C includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, CAL Check standard certificate, instrument quality certificate, instruction manual, and rigid carrying case. Reagents sold separately	
Reagents and Standards	HI97704	HI97704-11 CAL Check standard cuvettes for hydrazine HI93704-01 hydrazine reagents for 100 tests HI93704-03 hydrazine reagents for 300 tests