

HI97723 • HI97749

# Chromium (VI) HR and LR Portable Photometers

- **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

Hexavalent chromium salts are used in various industrial applications, such as in the manufacture of paints, dyes, explosives, and ceramics, and extensively in the metal finishing and plating industries. Due to its toxicity to humans, animals, and aquatic life, hexavalent chromium is actively monitored and neutralized in wastewater from the above industries.



Specifications	HI97749 Chromium (VI) LR	HI97723 Chromium (VI) HR	
Measurement	Range	0 to 300 µg/L (as Cr (VI))	0 to 1000 µg/L (ppb) (as Cr(VI))
	Resolution	1 µg/L	1 µg/L
	Accuracy @25°C (77°F)	±10 µg/L ±4% of reading	±5 µg/L ±4% of reading
Measurement System	Method	adaptation of the ASTM Manual of Water and Environmental Technology, D1687 Diphenylcarbohydrazide Method	
	Light Source	light emitting diode	
	Bandpass filter	525 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

**HI97723** and **HI97749** 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

**HI97749C** includes photometer, CAL Check standards, sample cuvettes (2), sample caps (2), plastic stoppers (2), 1.5V AA batteries (3), cuvette wiping cloth, scissors, CAL Check standard certificate, instrument quality certificate, instruction manual, and HI7101412 rigid carrying case. Reagents sold separately

## Reagents and Standards

HI97749	<b>HI97749-11</b> CAL Check standard cuvettes for chromium(VI) LR
	<b>HI93749-01</b> chromium(VI) LR reagents for 100 tests
	<b>HI93749-03</b> chromium(VI) LR reagents for 300 tests
HI97723	<b>HI97723-11</b> CAL Check standard cuvettes for Chromium(VI) HR
	<b>HI93723-01</b> chromium(VI) HR reagents for 100 tests
	<b>HI93723-03</b> chromium(VI) HR reagents for 300 tests