

HI749 · HI723

# Chromium VI Low Range and High Range

## Handheld Colorimeters

- Easier to use and more accurate than chemical test kits
- Dedicated to a single parameter
- Small size, big convenience
- Ideal for:
  - Water quality
  - Environmental
  - Plating
  - Education

There are two natural forms of ionic chromium: the hexavalent Cr(VI) and the trivalent Cr(III). Cr(III) is much less toxic than Cr(VI) and seldom found in potable waters. Cr(VI), however, is toxic to humans and is found in water. Even though the toxic effects from Cr(VI) in drinking water are not well documented, it is a suspected carcinogen.

There are many industries that use chromic acid and other forms of Cr(VI) that could be a possible source of Cr(VI) pollution in either water, air, or both. One industry that can introduce Cr(VI) to water sources is the chrome-plating industry. Chromic acid is used in the electroplating process and can be present in industrial waste waters. Cr(VI) can also enter water supplies from industrial cooling towers where chromic acid is added to the water to inhibit metal corrosion.

The maximum permissible level of Cr(VI) allowed to be released into the waterways is 50 ppb. Its level in drinking water is normally much lower, and a level higher than 3 ppb is suggestive of industrial pollution.

The HI723 and HI749 Checker®HC Handheld Colorimeters are a simple, accurate, and cost effective way to measure Cr(VI). Each model is designed for a specific range (low or high) in order to provide high levels of accuracy.

The contoured style of these Checker HC's fit easily in the palm of your hand or pocket and the large LCD is easy to read. The auto shut-off feature assures the battery life will not be drained if you forget to turn it off.



Specifications	HI749 (LR)	HI723 (HR)
Range	0 to 300 ppb	0 to 999 ppb
Resolution	1 ppb	1 ppb
Accuracy @25°C (77°F)	±3 ppb ±5% of reading	±5 ppb ±4% of reading
Light Source	LED @ 525 nm	
Light Detector	silicon photocell	
Environment	0 to 50°C (32 to 122°F); RH max 95% non-condensing	
Battery Type	1.5V AAA (1)	
Auto-off	after ten minutes of non-use	after ten minutes of non-use and two minutes after reading
Dimensions	86.0 x 61.0 x 37.5 mm (3.4 x 2.4 x 1.5")	
Weight	64 g (2.3 oz)	
Method	adaptation of the ASTM Manual of Water and Environmental Technology, D1687-92, Diphenylcarbohydrazide method. The reaction between chromium VI and the reagent causes a purple tint in the sample.	
Ordering Information	<p><b>HI749</b> Checker®HC is supplied with sample cuvettes with caps (2), chromium LR reagent starter kit (reagents for 6 tests), battery, and instructions.</p> <p><b>HI723</b> Checker®HC is supplied with sample cuvettes with caps (2), chromium HR reagent starter kit (reagents for 6 tests), battery, and instructions.</p>	
Reagent Set	<b>HI749-25</b> (25 tests)	<b>HI723-25</b> (25 tests)
Calibration Set	<b>HI749-11</b>	<b>HI723-11</b>