

Chromium VI High Range Handheld Colorimeter

There are two natural forms of ionic chromium, the hexavalent ion, 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.

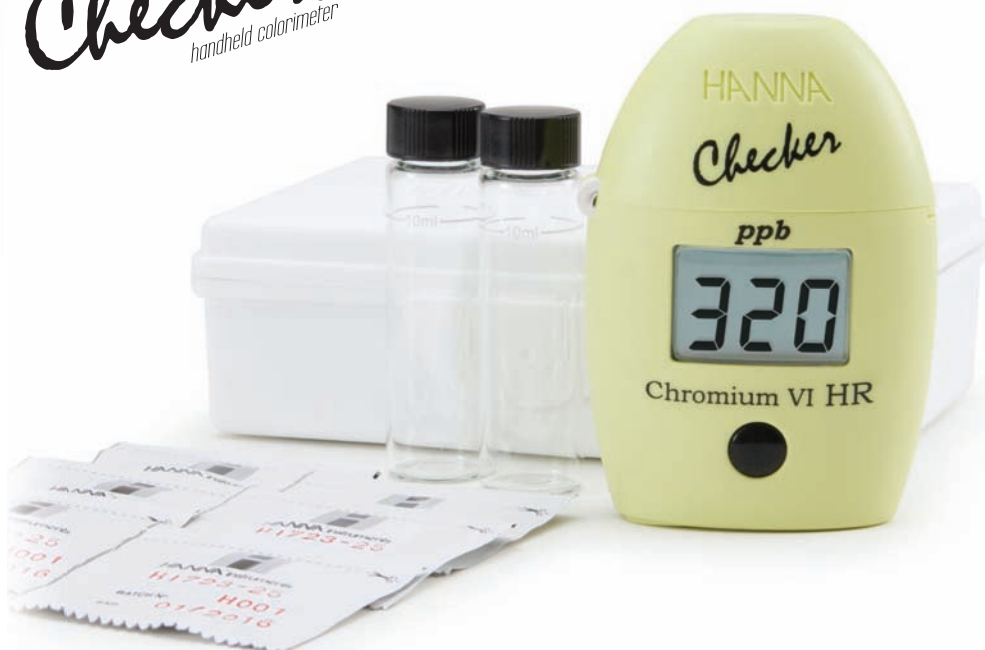
There are many industries that use chromic acid and other forms of Cr (VI) that could be a possible source of Cr (VI) pollution in either water or air or both. One industry that can introduce Cr (VI) to water sources is the chrome-plating industry (for the plating of car bumpers). Chromic acid is used in the electroplating process and can be present in industrial waste waters. Cr (VI) also can 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.

By monitoring this parameter with the HANNA HI 723 Checker®HC, serious health and safety risks can be avoided.

The HI 723 Checker®HC is extremely simple to use. First, zero the instrument with your water sample. Next, add the reagent, shake vigorously for 10 seconds. Last, place the vial into the Checker®HC, press the operational button for about 3 seconds and the display will show the countdown prior to the measurement or, alternatively, wait for 6 minutes and press operational button. When the timer ends the meter will perform the reading. The Checker®HC displays concentration in ppb of chromium VI. It's that easy.

Checker®HC
handheld colorimeter



Easier to use and more accurate than chemical test kits

- Diphenylcarbohydrazide method
- Accuracy ± 5 ppb $\pm 5\%$ of reading
- 1 ppb ($\mu\text{g/L}$) resolution
- Large, easy to read digits
- Auto shut off

Dedicated to a single parameter

- Designed to work with HANNA's powder reagents
- Uses 10 mL glass cuvettes

Small size, big convenience

- Weighing a mere 64 g (2.25 oz.), the Checker®HC easily fits into the palm of your hand or pocket
- Use for quick and accurate on the spot analysis
- Single button operation: zero and measure
- Operated by a single AAA battery

Ideal for

- Water quality

ORDERING INFORMATION

HI 723 Checker®HC is supplied with sample cuvettes with caps (2 ea.), powder reagents for chromium VI HR (6), battery and instructions.

REAGENTS AND STANDARDS

- HI 723-25 Reagents for 25 tests
- HI 723-11 Calibration checking set (0 and 300 ppb chromium VI)

ACCESSORIES

- HI 731318 Cuvette cleaning cloth (4)
- HI 731321 Glass cuvettes (4)
- HI 731225 Caps for cuvettes (4)
- HI 93703-50 Cuvette cleaning solution, 230 mL

SPECIFICATIONS	HI 723 (Chromium VI High Range)
Range	0 to 999 ppb
Resolution	1 ppb
Accuracy @ 25°C/77°F	$\pm 5\%$ of reading ± 5 ppb
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) 1.5V AAA
Auto-off	after ten minutes of non-use
Dimensions	81.5 x 61 x 37.5 mm (3.2 x 2.4 x 1.5")
Weight	64 g (2.25 oz.)
Method	adaptation of the ATSM, Manual of Water and Environmental Technology, D 1687-92, Diphenylcarbohydrazide method