

Color of Water Handheld Colorimeter

True color is caused by dissolved compounds in water. It can be natural or artificial. Dissolved and suspended solids (together) cause apparent color. Color is measured in Platinum-Cobalt units. The AWWA recommends ≤ 15 PCU.

The term "color" is used here to mean true color, that is, the color of water from which turbidity has been removed. The term "apparent color" includes not only color due to substances in solution, but also color that is due to suspended matter. Apparent color is determined on the original sample without filtration or centrifugation. In some highly colored industrial wastewaters, color is contributed principally by colloidal or suspended material. In such cases both true color and apparent color should be determined.

To determine color by currently accepted methods, turbidity must be removed before analysis. Methods for removing turbidity without removing color vary. Filtration yields results that are reproducible from day to day among laboratories, however, some filtration procedures may also remove some true color. Centrifugation avoids interaction of color with filter materials, but results vary with the sample nature and size and speed of the centrifuge. When sample dilution is necessary, whether it precedes or follows turbidity removal, it can alter the measured color. Acceptable pretreatment procedures are included with each method. State the pretreatment method when reporting results.

The HI 727 Checker®HC is extremely simple to use. First, zero the instrument with deionized water. Next, prepare the sample according to the Apparent/True color measurement. Place the second vial with prepared sample into the Checker®HC, press the operational button and the HI 727 Checker®HC displays the color of water in PCU.

Checker®HC
handheld colorimeter



Easier to use and more accurate than chemical test kits

- Diphenylcarbohydrazide method
- Accuracy ± 10 PCU $\pm 5\%$ of reading
- 5 PCU resolution
- Large, easy to read digits
- Auto shut off

Dedicated to a single parameter

- 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 727 Checker®HC is supplied with sample cuvettes with caps (2 ea.), battery and instructions

REAGENTS AND STANDARDS

- HI 740230 Deionized water, 230 ml
- HI 727-11 Calibration checking set (0 and 150 PCU)

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 727 (Color of Water)
Range	0 to 500 PCU
Resolution	5 PCU
Accuracy @ 25°C/77°F	$\pm 5\%$ of reading ± 10 PCU
Light Source	LED @ 470 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 Standard Methods for the Examination of Water and Wastewater, 21th edition, Colorimetric Platinum Cobalt method