

DG Water Test
Hexavalent Chromium
Low Range Narrow Span
(PN: 82005)



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Manual



1. Application

The DG Water Test PN: 82005 is a colorimetric water test kit designed to provide real-time indication and quantification of hexavalent chromium in water.

2. Components of the Test Kit

- 30 Sample Vials, PN: 82005-1030
- One Developing Solution Bottle, PN: 82005-2000
- 30 Disposable Pipettes, PN: 82005-3030
- One Color Comparator, PN: 82005-6000

3. Components of the Test Kit Refill

- 30 Sample Vials, PN: 82005-1030
- One Developing Solution Bottle, PN: 82005-2000
- 30 Disposable Pipettes, PN: 82005-3030

To Reorder: PN: 82005-5000

4. Specifications

4.1. Overall Specification

A. Sample Vial

- Weight: 0.75g (0.027oz)
- Dimensions: 3.3cm (1.3in), Φ : 10mm (0.4" in)
- Operating temperature: 4°C to 60°C (39°F to 140°F)
- Minimum detectable limit: 1.5ppm in 5 minutes
- Detection range with color comparator: 1.5 to 12ppm
- Color change: Colorless to pink or purple
- Storage temperature: 4°C to 25°C, (39°F to 77°F)
- Shelf life: 1 year

B. Developing Solution

- Weight: 9.0g (0.3oz)
- Dimensions: 5.9cm (2.3in), Φ : 1.8cm (0.7" in)

C. Color Comparator

- Weight: 28g (1oz)
- Dimensions: 10.9cm (4.3in) x 10.5cm (4.1in) x 0.7cm (0.3in)
- Range: 1.5ppm to 12ppm
- Increments (ppm): 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 10.0, 10.5, 11.0, 11.5, 12.0.

D. Disposable Pipette

- Weight: 0.75g (0.027oz)
- Dimensions: 15cm (6in), Φ : 1.3cm (0.5" in)
- Capacity: 0.5ml

4.2. Cross interferences

None known

5. Operating Instructions

- Use gloves and protective glasses when handling Hexavalent chromium.

- Ensure that packaging pouch is intact.
- Open packaging pouch by tearing off the top part from one of side notches.
- Remove one sample vial from packaging pouch.
- Open sample vial cap and add 0.4ml of water sample using the disposable pipette (Figure 1).
- Add three drops of developing solution to sample vial (Figure 2).
- Firmly close sample vial cap and shake (Figure 3).
- Wait 5 minutes with occasional shaking for complete color development.

NOTE: Reading the result before 5 minutes or waiting much longer than 5 minutes may lead to negative or positive results

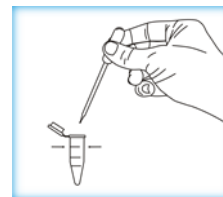


Figure 1

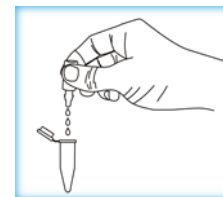


Figure 2



Figure 3

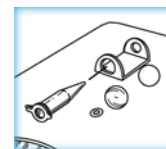


Figure 4

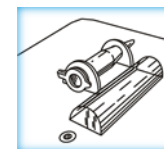


Figure 5



Figure 6

- Use the color comparator (Figure 6) to determine the concentration of hexavalent chromium in the water sample
 - Insert the sample vial into the vial holder as shown in Figures 4 and 5.
 - Turn the bottom color wheel to match colors. The color formed in the sample vial is directly proportional to the concentration of hexavalent chromium in the water sample.
 - To compensate for any dark substance or dirt in the water sample, turn the top gray scale wheel to achieve better color match.