



RX MARINE INTERNATIONAL

Total Solution Total Protection

AN ISO CERTIFIED COMPANY



CHLORINE TEST KIT

Part/Order no:

RXSOL-62-5517

REAGENT:

1. Color Comparator Cube
2. Chlorine Reagent 1
3. Chlorine Reagent 2
4. Chlorine Reagent 3

Method:

colorimetric, DPD, with color card and comparator block with long test tubes 0.010 - 0.025 - 0.045 - 0.06 - 0.08 - 0.10 - 0.15 - 0.20 - 0.30 Aqua quant the test can be used for the determination of free chlorine. The chlorine concentration can be measured semi quantitatively by visual comparison of the color of the measurement solution with the color fields of the color card.

Specifications:

Range	0.0 to 2.5 mg/L (ppm) Chlorine
Smallest Increment	0.5 mg/L (ppm) Chlorine
Analysis Method	Colorimetric
Number of Tests	50 (average)
Case Dimensions	220x145x55 mm (8.7x5.7x2.1")

Significance and Use:

In pools and drinking water supplies, chlorination serves to kill or deactivate disease-producing microorganisms. It can also improve water quality by reacting with ammonia, iron, sulfide and some organic substances. However, an excess concentration of chlorine in water can produce adverse conditions, such as formation of carcinogenic chloroform or other toxins. To maximize the purpose for chlorination and minimize any adverse effects, it is essential to monitor the chlorine levels closely. The Hanna Chlorine Test Kit determines the Total Chlorine concentration in water via a color cube. This makes the test kit practical for field use. No iodine or bromine can be present for this test to work properly.

Chemical Reaction:

The addition of chlorine to water produces hydrochloric and hypochlorous acids. The hypochlorous acid acts as the disinfectant and bleaching agent. The formation of chloramines and nitrogen trichloride will occur if ammonia is present. These are known as bound chlorine. Total chlorine is measured by a colorimetric method. The reaction if buffered at approx. 6.3 pH; in presence of an excessive quantity of iodide ions, the DPD (N,N-diethyl pphenylenediamine) is oxidized by chlorine producing a reddish color. The color intensity of the solution determines the total chlorine concentration.