

Copper, Cyanide, Cyanuric Acid, Detergents

Copper

Copper is an important element in the metabolism of plants and animals and is also used to monitor the bacteriological growth in potable water tanks. Corrosion of pipes contributes to high quantities of copper in water.

Cyanide

Cyanide is a pollutant that originates mostly from metallurgical, galvanic and other industrial processes, such as gold and silver extraction. Because it is poisonous to the human nervous system, it is imperative to monitor and control cyanide levels in potable water. When in contact with acids, cyanide frees poisonous gases.

The Environmental Protection Agency (EPA) has established that the maximum level of cyanide in water is not to exceed 0.2 mg/L (ppm).

Cyanuric acid

Cyanuric acid is applied in swimming pools to slow down the decomposition of chlorine. With a correct dose, it can save up to 80% of normal chlorine consumption during peak sunny months. Cyanuric acid is also used in chlorinated bleaches and selective herbicides.

Detergents (anionic)

Detergents are found in water from industrial and public wastewater discharges.

The most commonly used are linear-alkyl-sulfonates (LAS) and alkyl-benzene-sulfonates (ABS). The LAS are biodegradable and quickly destroyed by microorganisms.

The total concentration of LAS/ABS anionic detergents in natural water should be kept below 0.1 mg/L and in public wastewater discharge it should be between 1 and 20 mg/L.



HI 3855 - Cyanide Checker Disc®



HI 3847 - Copper

Parameter	Code	Method	Range*	Smallest Increment	Chemical Method	Number of Tests	Weight
Copper	HI 3847	Colorimetric	0.0-2.5 mg/L	0.5 mg/L	Bicinchonic acid	100	150 g
	HI 3856	Colorimetric	0.00-0.25 mg/L	0.05 mg/L	Bicinchonic acid	100	180 g
	HI 38075	Colorimetric	0.00-0.25 mg/L 0.0-6.0 mg/L	0.05 mg/L 1.2 mg/L	Bicinchonic acid	100	555 g
Cyanide (as CN ⁻)	HI 3855	Checker disc	0.00-0.30 mg/L	0.01 mg/L	Pyridine-pyrazolone	100	580 g
Cyanuric Acid	HI 3851	Turbidimetric	10-100 mg/L	5 mg/L	Turbidimetric	100	195 g
Detergents	HI 3857	Checker disc	0.00-1.30 mg/L	0.02 mg/L	Methylene blue	35	1245 g

* 1 mg/L = 1 ppm

For spare reagents, see section V. For accessories, see section U.