



Mi404/Mi406/Mi413/Mi414

Free & Total Chlorine and Chloride Photometers

Milwaukee provides a range of chlorine photometers for all applications: swimming pool treatments, household cleaners, dishwasher additives, laundry powders/liquids and cooling water treatment products all contain chlorine as an oxidizing biocide. Drinking water contains residual chlorine to maintain water purity throughout the supply lines.

Milwaukee offers 3 microprocessor-based instruments with greater resolution, better accuracy and immediate results. You can choose between three different models:

Mi404 for measuring free (0.00 to 5.00 mg/L) and total (0.00 to 5.00 mg/L) chlorine, **Mi406** for measuring free (0.00 to 5.00 mg/L) chlorine and **Mi413** for measuring free (0.00 to 10.00 mg/L) and total (0.00 to 10.00 mg/L) chlorine.





Chloride is a major constituent of sea water and is extremely corrosive in acidic environments. It requires close monitoring in applications such as marine boiler systems that are effected by seawater contamination.

Chlorides are used by the water treatment professional to determine cycles of concentration in low pressure boilers and cooling systems.

It is essential to monitor chloride concentrations in boiler systems to prevent metal parts being damaged. In high levels, chloride can corrode stainless steel.

Milwaukee offers the **Mi414** microprocessor-based photometer for measuring chloride (0.00 to 20.00 mg/L).



Specifications		 Mi404 Free & Total Chlorine	 Mi406 Free Chlorine	 Mi413 Free & Total Chlorine HR	 Mi414 Chloride
Range	Free Chlorine Total Chlorine Chloride	0.00 to 5.00 mg/L (Cl ₂) 0.00 to 5.00 mg/L (Cl ₂)	0.00 to 5.00 mg/L (Cl ₂)	0.00 to 10.00 mg/L (Cl ₂) 0.00 to 10.00 mg/L (Cl ₂)	0.00 to 20.00 mg/L (Cl ⁻)
Resolution	Free Chlorine Total Chlorine Chloride	0.01 mg/L (0.00 to 3.50 mg/L); 0.10 mg/L (above 3.50 mg/L) 0.01 mg/L (0.00 to 3.50 mg/L); 0.10 mg/L (above 3.50 mg/L)	0.01 mg/L (0.00 to 3.50 mg/L); 0.10 mg/L (above 3.50 mg/L)	0.01 mg/L (0.00 to 3.50 mg/L); 0.10 mg/L (above 3.50 mg/L) 0.01 mg/L (0.00 to 3.50 mg/L); 0.10 mg/L (above 3.50 mg/L)	0.01 mg/L
Accuracy	Free Chlorine Total Chlorine Chloride	±0.04 mg/L @1.50 mg/L ±0.04 mg/L @1.50 mg/L	±0.04 mg/L @1.50 mg/L	±0.10 mg/L @5.00 mg/L ±0.10 mg/L @5.00 mg/L	±0.4 mg/L @10.0 mg/L
Method		adaptation of USEPA method 330.5 and Standard Method 4500-Cl G	adaptation of USEPA method 330.5 and Standard Method 4500-Cl G	adaptation of USEPA method 330.5 and Standard Method 4500-Cl G	adaptation of mercury (II) thiocyanate method
Light Source		tungsten lamp	tungsten lamp	tungsten lamp	Blue LED 466 nm
Light Detector		silicon photocell and 525 nm narrow band interference filter	silicon photocell and 525 nm narrow band interference filter	silicon photocell and 525 nm narrow band interference filter	silicon photocell and 466 nm narrow band interference filter
Environment		0 to 50°C / 32 to 122°F max RH 100%	0 to 50°C / 32 to 122°F max RH 100%	0 to 50°C / 32 to 122°F max RH 100%	0 to 50°C / 32 to 122°F max RH 100%
Battery Type		1 x 9 V	1 x 9 V	1 x 9 V	1 x 9 V
Auto-off		after 10 minutes of non-use	after 10 minutes of non-use	after 10 minutes of non-use	after 10 minutes of non-use
Dimensions		192 x 104 x 52 mm	192 x 104 x 52 mm	192 x 104 x 52 mm	192 x 104 x 52 mm
Weight		380 g	380 g	380 g	380 g

Accessories

- Mi504-100** Free & Total Chlorine liquid reagent set (100 tests)
- Mi506-100** Free Chlorine liquid reagent set (100 tests)
- Mi513-045** Free & Total Chlorine liquid reagent set (45 tests)
- Mi514-100** Chloride liquid reagent set (100 tests)



- Mi524-100** Total Chlorine powder reagents (100 tests)
- Mi526-100** Free Chlorine powder reagents (100 tests)
- Mi0001** Glass cuvettes (2 pcs)
- Mi0002** Caps for cuvettes (2 pcs)
- Mi0003** Stoppers for cuvettes (2 pcs)

Ordering Information

Mi404, Mi406, Mi413 and Mi414 are supplied complete with 2 cuvettes, reagents, hard carrying case, wiping tissue, 9V battery and instructions.