

# 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	 <b>Mi404</b> Free & Total Chlorine	 <b>Mi406</b> Free Chlorine	 <b>Mi413</b> Free & Total Chlorine HR	 <b>Mi414</b> Chloride
<b>Range</b>	<b>Free Chlorine</b> 0.00 to 5.00 mg/L (Cl <sub>2</sub> ) <b>Total Chlorine</b> 0.00 to 5.00 mg/L (Cl <sub>2</sub> )	0.00 to 5.00 mg/L (Cl <sub>2</sub> )	0.00 to 10.00 mg/L (Cl <sub>2</sub> ) 0.00 to 10.00 mg/L (Cl <sub>2</sub> )	0.00 to 20.00 mg/L (Cl <sup>-</sup> )
<b>Resolution</b>	<b>Free Chlorine</b> 0.01 mg/L (0.00 to 3.50 mg/L); 0.10 mg/L (above 3.50 mg/L) <b>Total Chlorine</b> 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
<b>Accuracy</b>	<b>Free Chlorine</b> ±0.04 mg/L @1.50 mg/L <b>Total Chlorine</b> ±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
<b>Method</b>	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
<b>Light Source</b>	tungsten lamp	tungsten lamp	tungsten lamp	Blue LED 466 nm
<b>Light Detector</b>	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
<b>Environment</b>	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%
<b>Battery Type</b>	1 x 9 V	1 x 9 V	1 x 9 V	1 x 9 V
<b>Auto-off</b>	after 10 minutes of non-use	after 10 minutes of non-use	after 10 minutes of non-use	after 10 minutes of non-use
<b>Packaging dimensions</b>	305 x 280 x 115 mm	305 x 280 x 115 mm	305 x 280 x 115 mm	305 x 280 x 115 mm
<b>Packaging weight</b>	1.24 kg	1.26 kg	1.52 kg	1.44 kg

### 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 cuvetts (2 pcs)
- Mi0002** Caps for cuvetts (2 pcs)
- Mi0003** Stoppers for cuvetts (2 pcs)

### Ordering Information

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