

# Chlorine dioxide

**Test kit for performing colorimetric tests on chlorine dioxide in drinking water, water reservoirs and disinfectant solutions**

## Method:

At a pH value of 5 to 6, chlorine dioxide reacts with *N,N*-diethyl-1,4-phenylenediamine (DPD) and forms a red-violet dye.

## Measurement range:

0.2–3.8 mg/L ClO<sub>2</sub>

## Contents of test kit (\*refill pack):

sufficient for 150 tests

16 mL ClO<sub>2</sub>-1\*

18 mL ClO<sub>2</sub>-2\*

25 mL ClO<sub>2</sub>-3\*

2 screw-plug measuring glasses

1 slide comparator

1 color chart

1 plastic syringe 5 mL

1 instructions for use\*

## Hazard warning:

Information regarding safety can be found on the box' label and in the safety data sheet. You can download the SDS from [www.mn-net.com/SDS](http://www.mn-net.com/SDS).

## Procedure:

### I) colorimetric determination with color chart

a) Without chlorine interference

*Also refer to the pictogram on the back of the color chart.*

1. Pour 5 mL water sample into one of the measuring glasses using the plastic syringe.  
Place it on position A in the comparator.

#### Only add reagents to measuring glass B

2. **Add 3 drops of ClO<sub>2</sub>-2** to measuring glass B.
3. **Add 3 drops of ClO<sub>2</sub>-3** to measuring glass B.
4. Pour **5 mL water sample** in measuring glass B with the plastic syringe, seal the tube and mix.
5. Open the glass once again and place it on position B in the comparator.
6. Slide the comparator until the colors match in the inspection hole on top. **Immediately** check the measurement reading in the recess on the comparator reed. Mid-values can be estimated.
7. After use, rinse out both measuring glasses thoroughly and seal them.

b) In the event of chlorine interference

1. Pour **5 mL water sample** to one of the measuring glasses (A) with the plastic syringe.
2. **Add 2 drops of ClO<sub>2</sub>-1** in measuring glass A.
3. Seal the measuring glass A, mix and wait 2 minutes.
4. Meanwhile, add **3 drops of ClO<sub>2</sub>-2** to the empty measuring glass (B).
5. **Add 3 drops of ClO<sub>2</sub>-3** to measuring glass B.
6. After 2 minutes, transfer 5 mL from measuring glass A to measuring glass B with the plastic syringe, seal the glass and mix.
7. Open measuring glass B and insert into position B of the comparator.
8. Fill measuring glass A again with 5 mL water sample with the plastic syringe and insert into position A of the comparator.
9. Slide the comparator until the colors match in the inspection hole on top. **Immediately** check the measurement reading in the recess on the comparator reed. Mid-values can be estimated.
10. After use, rinse out both measuring glasses thoroughly and seal them.

### II) photometric determination

The reagents are also suitable for **photometric evaluation**. Please refer to the separate instructions for photometric performance.

The method cannot be applied for the analysis of sea water.

## Disposing of the samples:

Information regarding disposal can be found in the safety data sheet. You can download the SDS from [www.mn-net.com/SDS](http://www.mn-net.com/SDS).

## Interferences:

Free chlorine up to 5 mg/L is not determined with the procedure according to instruction b) and thus, does **not** interfere.

## Storage:

Store the test kit in a cool (< 25 °C) and dry place.