

Oxygen dissolved C

M292

10 - 800 µg/L O₂ ^{c)}O₂

Rhodazine D TM

Instrument specific information

The test can be performed on the following devices. In addition, the required cuvette and the absorption range of the photometer are indicated.

| Instrument Type | Cuvette | λ | Measuring Range |
|--|---------|--------|---|
| MD 100, MD 110, MD 600, MD 610, MD 640, MultiDirect | ø 13 mm | 530 nm | 10 - 800 µg/L O ₂ ^{c)} |
| XD 7000, XD 7500 | ø 13 mm | 547 nm | 10 - 1100 µg/L O ₂ ^{c)} |

Material

Required material (partly optional):

| Reagents | Packaging Unit | Part Number |
|---------------------------|----------------|-------------|
| Vacu-vial Oxygen Test Kit | 1 Set | 380450 |

The following accessories are required.

| Accessories | Packaging Unit | Part Number |
|---|----------------|-------------|
| Adapter for round cuvettes 13 mm Ø | 1 pc. | 19802192 |
| Adapter (13 mm) MultiDirect for Vacu-vial | 1 pc. | 192075 |

Application List

- Boiler Water

Preparation

1. Before performing the test, you must read through the original instructions and safety advice that is delivered with the test kit (MSDS are available on the homepage of www.chemetrics.com).

Notes

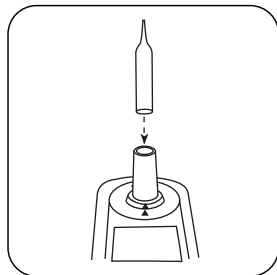
1. This method is adapted from a product by CHEMetrics. The measuring range and wavelength used for this photometer may differ from the data specified by CHEMetrics.
2. Keep Vacu-Vials® in the dark at room temperature.
4. Vacu-vials® is a registered trademark of the company CHEMetrics, Inc. / Calverton, U.S.A.



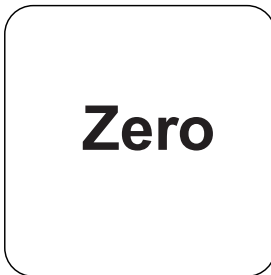


Determination of Oxygen, dissolved with Vacu Vials® K-7553

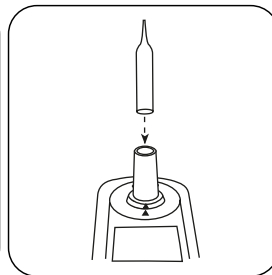
Select the method on the device.



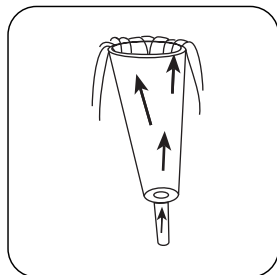
Place **Zero ampoule** in the sample chamber.



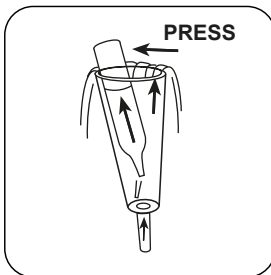
Press the **ZERO** button.



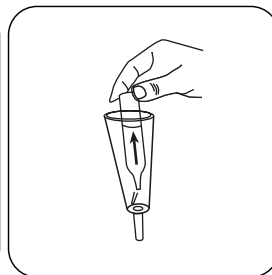
Remove zero ampoule from the sample chamber.



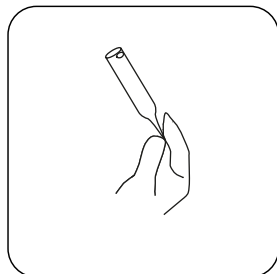
Run test water through the sampling vessel for several minutes from bottom to top to remove air bubbles.



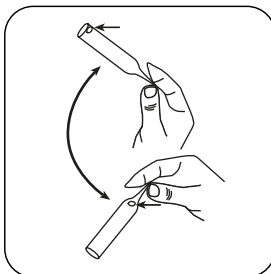
Place a Vacu-vial® ampoule in the sampling vessel. Break off the ampoule tip by applying light pressure against the vessel wall. Wait for the ampoule to fill completely.



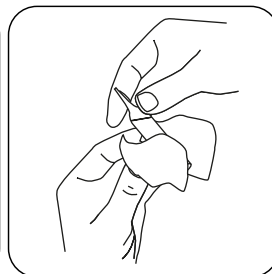
Then quickly remove the ampoule from the sampling vessel with the tip down.



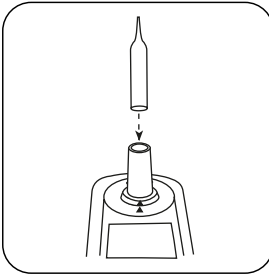
Close the opening with one finger, to avoid contact with the air.



Invert the ampoule several times.



Dry the outside of the ampoule.

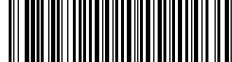


Place the ampoule in the sample chamber.

Press the **TEST** (XD: **START**) button.

The result in mg/L Oxygen appears on the display.

Test



Chemical Method

Rhodazine D TM

Appendix

Calibration function for 3rd-party photometers

$$\text{Conc.} = a + b \cdot \text{Abs} + c \cdot \text{Abs}^2 + d \cdot \text{Abs}^3 + e \cdot \text{Abs}^4 + f \cdot \text{Abs}^5$$

| | ∅ 13 mm |
|---|--------------------------|
| a | $-2.60239 \cdot 10^{+1}$ |
| b | $9.19343 \cdot 10^{+2}$ |
| c | |
| d | |
| e | |
| f | |

Derived from

ASTM D 5543-15

⁹⁾ MultiDirect: Adapter is necessary for Vacu-vials[®] (Order code 19 20 75)