Lovibond® Water Testing

Tintometer® Group

MD 200 COD VARIO Set-Up

Determination of the chemical oxygen demand index (ST-COD)

Small-scale sealed-tube

Total range 0 - 15000 mg/l

Waste water parameter COD

The chemical oxygen demand, ST-COD value (ST = small scale **s**ealed **t**ube), of water as determined by this dichromate method can be considered as an estimate of the theoretical oxygen demand, i.e. the amount of oxygen consumed in total chemical oxidation of the organic constituents present in the water.

MD 200 COD VARIO Photometer

With a measuring range from 0 to 15,000 mg/l O_2, the Lovibond® COD VARIO photometer are suitable for waste water testing.

Two LEDs light sources with long-term stability (λ_1 = 430 nm; λ_2 = 610 nm, according to ISO 15705:2002), a waterproof sample chamber, a large digital display, and the user-friendly keypad ensure maximum operating reliability and convenience.

Set-Up MD 200 COD VARIO

The Lovibond® COD VARIO set-up allows highly sensitive and precise water testing with minimum effort. It measures the ST-COD concentration by photometric detection employing a linear relationship between absorbance and concentration.

After adding the sample to a Lovibond® COD VARIO tube test (LR, MR according to ISO 15705:2002), it is heated in the reactor and then analysed in the photometer.

Ranges

0 – 150 mg/l O_2 ±3,5%*) FS
0 – 1500 mg/l O_2 ±3,5%*) FS
0 –15000 mg/l O_2 ±3,5%*) FS

* tolerance based on the use of potassium-hydrogenephthalate standards (DIN 38409)

Scroll Memory (SM)

To avoid unnecessary scrolling for the required test method, the instrument memorizes the last method used before switching off the instrument. When the instrument is switched on again, the scroll list comes up with the last used test method first.

Technical Data

Optics	LEDs, interference filters (IF) and photo sensor in transparent sample chamber. Wavelength specifications: 430 nm interference filter 610 nm interference filter
Wavelength Accuracy	± 1 nm
Photometric Accuracy[4)]	3% FS (T = 20°C – 25°C)
Photometric Resolution	0.01 A
Power Supply	4 batteries (AA), capacity approx. 53 hours or 15000 tests (continuous operation with backlit switched off
Auto - OFF	automatic switch-off
Display	backlit LCD (on keypress)
Storage	internal ring memory for 16 data sets
Interface	infrared interface for test data transfer to IRiM
Additional feature	real time clock and date
Calibration	factory calibration and user calibration. Reset to factory calibration possible
Dimensions	190 x 110 x 55 mm (L x W x H)
Weight	basic unit approx. 455 g (incl. batteries)
Environmental conditions	temperature: 5 – 40 °C rel. humidity: 30 – 90% (non condensing)

CE-Conformity

[4)] tested with standard solutions

COD VARIO tube tests

The Lovibond® COD VARIO tube tests are available for the measuring ranges 0-150 mg/l O_2, 0-1500 mg/l O_2 and 0-15000 mg/l O_2.
Their chemical properties and a 16 mm tube diameter is suitable also for use with Hach photometers.

Tube tests		**Order code**
0-150 mg/l O_2	(25 pc.) mercury free	2420710
	(25 pc.)	2420720
	(150 pc.)	2420725
0-1500 mg/l O_2	(25 pc.) mercury free	2420711
	(150 pc.) mercury free	2420716
	(25 pc.)	2420721
	(150 pc.)	2420726
0-15000 mg/l O_2	(25 pc.) mercury free	2420712
	(25 pc.)	2420722
	(150 pc.)	2420727

Standard solutions

Standard solutions are solutions with a defined concentration and are provided to check the operation methods and devices of the cuvette tests as well as the condition of optical filters and the instrument.

Standard solution	**Quantity**	**Code**
100 mg/l COD	30 ml	2420803
500 mg/l COD	30 ml	2420804
5000 mg/l COD	10 ml	2420805

Delivery Content Set-Up

- Instrument in carrying case
- 4 batteries (AA)
- Adapter for round vials ø 16 mm
- 2 sets of tube tests 0-150 mg/l, 0-1500 mg/l
- Thermoreactor RD125
- Tube stand
- 2 syringes 1 ml, 2 ml
- Guarantee sheet
- Certificate (COC)
- Instruction manual
- Order code 28 92 602