COD Setups COD VARIO (ISO 15705:2002) COD Photometer

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.

COD VARIO Photometers

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

Two LEDs light sources with long-term stability (λ_1 = 610 nm; λ_2 = 430 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.

MD 100 COD VARIO Order code: 27 61 20
(MD 100 photometer only in case)

MD 200 COD VARIO Order code: 289 25 02
(MD 200 photometer only in case)

Setups COD VARIO

The Lovibond® COD VARIO setups allow highly sensitive and precise water testing with minimum effort. They measure 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.

The COD setups comprise the photometer, 25 tube tests for each of the two lower measuring ranges, a reactor for sample digestion, and a vial stand.

COD Setup Order code: 27 61 30
MD 100 COD VARIO
Instrument in carrying case, 4 batteries (AAA), adapter for round vials ø 16 mm, 2 sets of tube tests 0-150 mg/l, 0-1500 mg/l, thermoreactor RD 125, tube stand, 2 syringes 1 ml, 2 ml, guarantee sheet, certificate (COC), instruction manual

COD Setup Order code: 289 26 02
MD 200 COD VARIO
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 RD 125, tube stand, 2 syringes 1 ml, 2 ml, guarantee sheet, certificate (COC), instruction manual

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)

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 different Hach photometers.

Tube tests	Order code
0-150 mg/l O_2	
(25 pc.), mercury free**	2 42 07 10
(25 pc.)	2 42 07 20
(150 pc.)	2 42 07 25
0-1500 mg/l O_2	
(25 pc.), mercury free**	2 42 07 11
(150 pc.), mercury free**	2 42 07 16
(25 pc.),	2 42 07 21
(150 pc.)	2 42 07 26
0-15000 mg/l O_2	
(25 pc.), mercury free**	2 42 07 12
(25 pc.)	2 42 07 22
(150 pc.)	2 42 07 27

** without chloride removal

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	2 42 08 03
500 mg/l COD	30 ml	2 42 08 04
5000 mg/l COD	10 ml	2 42 08 05

Highlights

- ST-COD sealed tubes ready for use
- Suppression of chloride interference
  up to 1000 mg/l (LR & MR)
  up to 10000 mg/l (HR)
- Mercury free tube tests,
  in absence of chloride interference
- 3 ranges:
  Low range:
  0 - 150 mg/l, meets ISO 15705:2002
  Middle range:
  0 - 1500 mg/l, meets ISO 15705:2002
  High range:
  0 - 15000 mg/l