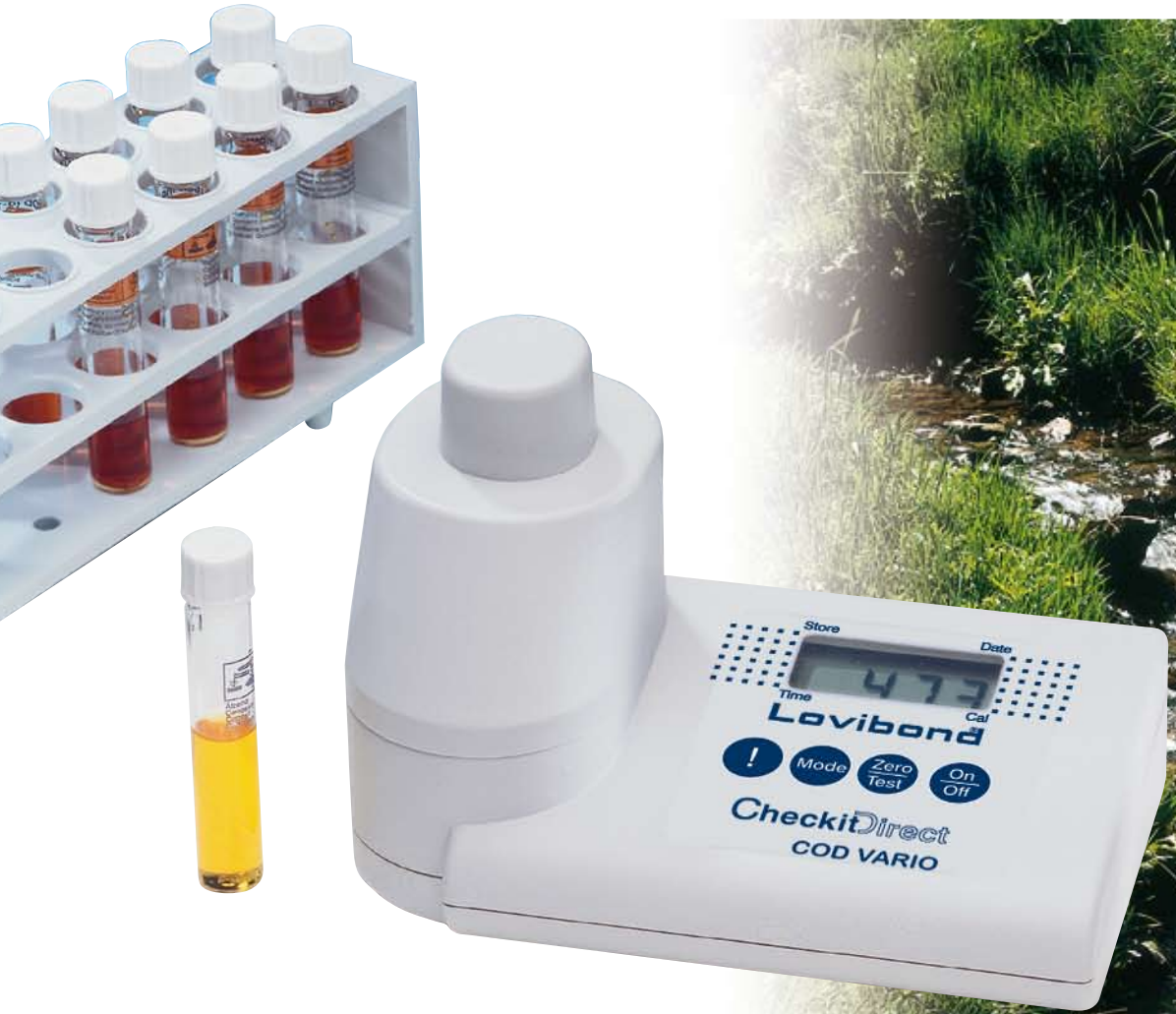
COD (ISO 15705:2002)
CheckitDirect COD VARIO Setup



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

Small-scale sealed-tube

Total range 0 - 15000 mg/l

Highlights

- ST-COD sealed tubes ready for use
- Suppression of chloride interference up to 1000 mg/l
- 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

Waste water parameter COD

The chemical oxygen demand, ST-COD value, 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.

Setup CheckitDirect COD VARIO

The Lovibond® CheckitDirect COD VARIO test setup 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 CheckitDirect COD VARIO photometer.

The COD-Setup comprises the CheckitDirect COD vario 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: 26 92 40
CheckitDirect COD VARIO
complete with photometer, reactor ET 108, 2 sets of 25 vials each 0-150 mg/l and 0-1500 mg/l and vial stand

COD-Setup Order code: 26 92 45
CheckitDirect COD VARIO
as above, but with reactor ET 125

COD-Setup Order code: 26 92 46
CheckitDirect COD VARIO
as above, but with reactor ET 125 SC**

CheckitDirect COD VARIO

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

Two LEDs light sources with long-term stability (λ_1 = 605 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.

CheckitDirect COD VARIO Order code: 26 92 50
(CheckitDirect photometer only in case)

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 solutions

100 mg/l COD	Order code: 2420803
500 mg/l COD	Order code: 2420804
5000 mg/l COD	Order code: 2420805

Technical data

Optics	temperature-compensated LEDs and photosensor amplifier in water proof sample chamber
Ranges	0 – 150 mg/l O_2 ±3.5%*) 0 – 1500 mg/l O_2 ±3.5%*) 0 –15000 mg/l O_2 ±3.5%*)
Power supply	9 V powerpack battery providing 40 hours operation
Auto - OFF	automatic switch-off
Display	backlit LCD (on keypress)
Storage	internal ring memory for 16 data sets
Add. 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	0.4 kg (base unit)
Environmental conditions	Temperature: 0 – 40 °C rel. humidity: 30 – 90% (non condensing)
CE-conformity	DIN EN 50081-1 VDE 0839 part 81-1: 1993-03 DIN EN 50082-2 VDE 0839 part 82-2: 1996-02

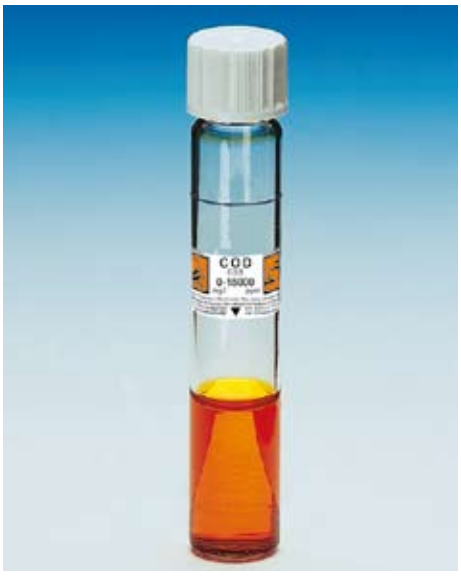
* based on the use of potassium-hydrogenephthalate standards (DIN 38 409)

COD - reactors ET 108 / ET 125 / ET 125 SC**

Chemical digestion of the samples is a prerequisite for the calculation of COD levels.

The required temperatures and reaction time are programmed using the membrane keypad on the front of the Lovibond® reactors ET 108 / ET 125 / ET 125 SC**. All units are equipped with four temperature ranges (70/100/120/150 °C). At the end of the reaction time, the reactors automatically switch off and emit an acoustic alarm.

COD-reactor ET 108	Order code: 2418930
COD-reactor ET 125	Order code: 2418938
COD-reactor ET 125 SC**	Order code: 2418939



Technical data for COD-reactors

Temperature:	ET 108 / ET 125 / ET 125 SC**: 70/100/120/150 °C ± 0.3 °C
Timer:	30, 60, 120 minutes and continuous operation, automatic switch-off with alarm
Heating:	ET 108: 270 Watts ET 125/ET 125 SC**: 400 Watts electronically controlled, with protection against overheating
Heating-up time:	approx. 10 minutes
Power supply:	ET 125: 230/115 V / 50-60 Hz ET 108 / ET 125 SC**: 230 V / 50-60 Hz
Weight:	ET 108: approx. 2.15 kg ET 125 / ET 125 SC**: approx. 3.60 kg
Dimensions: (L x W x H)	ET 108: 214 x 133 x 110 mm ET 125 / ET 125 SC**: 275 x 155 x 95 mm
Approval:	CE

** SC: Single current (only 230 V)

Please see pages 88 and 89 for further information on our reactors