

Lovibond® Water Testing

Tintometer® Group



Mini Catalogue | Lovibond® - The Original

www.lovibond.com



Rapid Tests

Titrimetric Rapid Tests

- Easy operation
- Exact reagent dosing
- High accuracy

Regular testing to observe the Water Quality

- Economical
- Accurate
- Reliable

The system for colorimetric water analysis

- More than 400 different test discs available
- Compensation for coloured and turbid samples
- Guaranteed constancy of the coloured glass standards

MINIKIT



CHECKIT® Comparator



Comparator 2000+



Colour Discs



For several decades, Tintometer® in Dortmund has been manufacturing reagents for water testing and marketing these reagents around the world under the brand name Lovibond®.

Different forms of reagents are required for different fields of application.

Tintometer® is the only reagent producer in the world that offers a complete range of reagent forms.

Tablet Reagents

- Secured storage in individually-packed aluminium strips
- Rapid dosage, even under in-field conditions
- High analysis accuracy and simple handling
- Guaranteed shelf life of 5-10 years

Powder Reagents

- Fast and easy use
- Extended shelf life
- High stability
- Their chemical properties is suitable also for use with Hach-Photometer-Systems.

Tube Tests

- 16 mm diameter tubes
- Precisely predosed reagent
- Time-saving methods
- Enhanced work safety
- Shipment in sturdy styrofoam box
- Can be used with other standard photometers (COD)

Liquid Reagents

- Rapid solubility
- Easy dosage
- 1 year guaranteed shelf life

Tablet Reagents



Powder Reagents



Tube Tests



Liquid Reagents



PHOTOMETER

Precise water analysis in high-quality design with interference filter technology



MD 100

The small, fast-reading MD 100 photometer is ideal for mobile on-site analysis. There are a large number of pre-programmed single parameter units. These are used in all areas of water analysis, for example, utilities, water treatment plants, industrial applications, beverage industry. The multi-parameter devices are used predominantly in the area of public pools and spas.

MD 200

This classic Lovibond® photometer is synonymous with accuracy and quality. These devices are an enhanced version of the 2in1, 3in1, 4in1, 5in1 and 6in1 series. They are ideal for use in all areas of water analysis.

MD 100 & MD 200 Photometer A powerful duo in water analysis

Designed to meet the latest technical requirements, both photometers can be used in practically every area of water analysis.

The high-precision optics with top-quality interference filters use long-term stable LEDs as light-source. Because there are no moving parts, the entire measurement device requires very minimal maintenance.

Precise and reproducible analysis results are rapidly obtained.

The units are extremely user-friendly with ergonomic design, compact dimensions and easy handling.

Precise results using high-quality interference filters



Photometer MultiDirect

The MultiDirect is a contemporary, microprocessor-controlled photometer with ergonomically designed keypad and large-format graphic display. It is equipped with a wide range of pre-programmed methods based on the proven range of Lovibond® tablet reagents, liquid reagents, tube tests and powder reagents (VARIO Powder Packs). Users can also store their own methods.

The MultiDirect is a filter photometer using interference filters at 6 different wavelengths. The unique design of the optics allows the automatic selection of the required wavelength without any moving parts. This and the dual beam technology utilizing an internal reference channel, guarantees the highest accuracy.



PHOTOMETER



Modern, mobile photometer
for rapid, reliable water testing

MD 600 Photometer

With the modern design of the MD 600 we have succeeded in combining the mobility of a portable photometer with the characteristics of a modern laboratory photometer.

This unit covers all the important parameters of water analysis, from aluminium to zinc. The MD 600 operates with 6 interference filters and uses long-life LEDs as a light-source. No moving parts are involved.

The illuminated display allows comfortably reading of the measurement results even in low light conditions.

Reference and Verification Standard Kits

The reference and verification standard kits are designed to assure the user of the accuracy and the reliability of the results.

PHOTOMETER

For water and
waste water testing
330 - 900 nm

Spectrophotometer SpectroDirect

The SpectroDirect is a modern single-beam spectrophotometer with an excellent price/performance ratio that is specifically designed for water testing.

The instrument is equipped with a wide range of pre-programmed methods based on the proven range of Lovibond® tube tests, tablet reagents, liquid reagents and powder reagents (Vario Powder Packs).



Multifunctional sample chamber

PHOTOMETER

Photometer PM 600 & PM 620

The PM 600 and PM 620 photometer range brings pool testing to the next level for discerning pool operators. The ergonomic, portable, waterproof design enables users to select just one unit for accurate analysis of up to 34 parameters anytime and anywhere.

The **PM 600** focusses on the main pool parameters required for balanced water including: Alkalinity, Bromine, Chlorine, Cyanuric Acid, Iron, Calcium Hardness, Copper, Sodium Hypochlorite, Ozone and pH-value.

The **PM 620** extends these capabilities to include up to 34 parameter variants from Acid Demand to Urea.

The ultimate range
in Pool Photometers
For reliable pool relevant
water analysis



BOD MEASUREMENT

The Lovibond® sensor system OxiDirect is a 6 sample system that allows precise measurements of BOD based on the manometric principle. Manometric respirometers relate oxygen uptake to the change in pressure caused by oxygen consumption while maintaining a constant volume. Thanks to the modern integral pressure sensors, it is no longer necessary to use mercury for pressure measurements.

- Direct sample selection
- Accurate and direct display of BOD values in mg/l
- User-friendly handling
- User-selectable measuring period from 1 to 28 days (BOD₅, BOD₇, OECD...)
- Automatic storage of all values
- Measuring ranges from 0 - 40 mg/l to 0 - 4000 mg/l BOD, sample volume related
- Auto start function after temperature equalisation
- Mercury-free, environmentally-friendly
- Inductive stirring system with automatic re-centering of stirring rods
- Interface RS 232



COD MEASUREMENT

COD 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.

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.

Thermoreactor RD 125

For the Tube test digestion.

Chemical digestion of samples is required for the photometric determination of COD, TOC, total phosphate and total nitrogen.

COD Setup MD 100



COD Setup MD 200



Waste Water Setup



Thermoreactor



TEMPER

Thermostatically controlled incubators

Lovibond® thermostatically controlled incubators are used for continuous temperature control over a range of 2 °C to 40 °C. This makes them ideal for a wide range of different applications in industrial and research laboratories.

The thermostatically controlled incubators are available in 4 sizes, with effective capacities from 135 to 395 litres. All models can be fitted with a standard door or a glass door.

- Backlit Display
- 2 °C to 40 °C
- Adjustable in steps of 0.1 °C
- 20 °C BOD determination
- 4 °C Storage of waste water samples
- 25 °C Enzyme activity (TTC test)
- 37 °C Colony count

Spark-free cabinets

The German BGR 120 guideline for laboratories stipulates that interior spaces must be explosion-protected where hazardous, explosive atmospheres can develop (for example, due to the presence of flammable liquids).

The Lovibond® cabinets in the EX range meet the requirements of this guideline and are fully equipped for daily laboratory use.

- Spark-free according to BGR 120
- 2 °C to 10 °C
- Continuously adjustable
- Robust materials
- Lockable



FLOCCULATION

Floc-Tester

Floc testers with continuously variable stirring speed for laboratory and field use.

Floc testers are designed for a range of applications – such as testing the efficiency of flocculation or precipitation agents.

State-of-the-art technology ensures maximum operating convenience and makes the unit maintenance-free. The main features of the laboratory floc testers are the continuously variable stirring speed, the digital display of stirring rpm, the timer function, the illuminated back panel, and the height adjustment option for the stirring blades during operation.



- Continuously variable stirring speed
- Digital display
- Height adjustment of the stirring blades during operation
- Timer feature

TURBIDITY



- Meets EN ISO 7027
- Automatic overall range adjustment with Standard-Set T-Cal
- Autoranging
- High accuracy
- Laboratory and mobile use
- RS 232 interface
- Storage for up to 1000 data-sets
- Real-time clock
- Waterproof sample chamber and housing

TurbiDirect with infra-red light source

Turbidity is measured according to EN ISO 7027 by nephelometric means (90° scattered light).

The infra-red light-source permits measurement of coloured and colour-free samples.



TURBIDITY

TurbiCheck with infra-red light source

The compact Lovibond® infrared turbidity meter TurbiCheck is designed to allow fast, precise on-site testing. The unit measures the scattered light at an angle of 90°, as stipulated in EN ISO 7027.

As infrared light is used for measurement purposes, the unit can be used to test both coloured and colourless liquids.

- Range 0.01 - 1100 NTU
- Measurement with infrared light at an angle of 90°
- Measurement of coloured liquids
- Easy handling
- 600 tests without battery change



TurbiCheck WL with white light source

The TurbiCheck WL allows easy turbidity measurement in either the field or in the laboratory. Using a „white light“ source and 90° detection, the TurbiCheck WL meets the specifications for EPA turbidity measurement (EPA Standard 180.1). Integrated diagnostics confirm proper operation and accuracy.

- Ideal for regulatory monitoring, process control or field use
- Simple operation
- Easy calibration
- Auto-Ranging
- Meets USEPA

ELECTROCHEMISTRY

The SD 300 pH is a rugged and waterproof hand-held meter for on-site analysis with PC interface for data transmission.

- pH
- Redox
- Temperature

The microprocessor-controlled SensoDirect 200 range of handheld meters from Lovibond® meets the day-to-day demands for sturdy and reliable systems for the measurement in aqueous media.

- Dissolved Oxygen (O_2)
- O_2 Concentration in mg/l
- O_2 Saturation in %
- Temperature $^{\circ}C/^{\circ}F$
- Conductivity
- TDS
- Salinity
- Temperature ($^{\circ}C/^{\circ}F$)

The SensoDirect 150 combines the features of several hand-held meters. It is designed for multi purpose operation.

- pH value
- Redox
- Oxygen (dissolved)
- Conductivity
- TDS
- Temperature ($^{\circ}C/^{\circ}F$)

SD 300 pH



SensoDirect Oxi 200



SensoDirect Con 200



SensoDirect 150



ELECTROCHEMISTRY

The SensoDirect 110 series consists of high quality, portable, battery operated meters. The instruments are equipped as standard with protective casing and built-in electrode holder.

- pH
- Conductivity
- Salinity

The new Lovibond® SD series comprises a range of compact, easy-to-use, hand-held instruments for the accurate measurement of pH, ORP, Con, TDS or Salt. With robust housing and fully waterproof (IP67) casing, these testers are the ideal solution for in-situ testing in environmental, industrial or pool & spa applications.

- pH
- ORP/Redox
- Conductivity
- TDS
- Salt

SensoDirect pH 110 • Con 110 • Salt 110



SD 50 pH • SD 60 ORP • SD 70 Con • SD 80 TDS • SD 90 Salt



INDUSTRIAL WATER ANALYSIS

Designed for the water treatment professional, these well proven cases are an excellent option for constructing bespoke portable laboratories that feature colorimetric, titration and electro-chemical equipment. Fast becoming an industry standard for the water treatment engineer.

The range of test kits and equipment for cooling water contain all equipment and test reagents required to optimise treatments and monitor critical control parameters quickly, safely and accurately, ensuring optimum output and efficiency.

The new Lovibond® range consists of individually designed and customised Water Test Kits for Industrial Water Treatment. Current applications include Marine, Microbiological, Industrial Water, Legionella, Food and Beverage, Boiler and Cooler water systems, the Hygiene sector, Hydroponics, Swimming Pools, Potable Water and Waste Water. All products are available stand-alone or as an integrated set, housed in one of the comprehensive Lovibond® engineering kits.

The compact DIGI Titrator is at the heart of the Lovibond® professional range of portable laboratories where several syringettes can be included in one kit for maximum flexibility. One syringette per test type.

- Brix and Glycol
- Convenient, fast, accurate
- No mess, instant results
- Automatic temperature compensation
- Direct readings of freeze points and concentration (Ethylene Glycol & Propylene Glycol)

Portable Laboratories



Cooling Water Test Kit



DIGI Titrator



Refractometer



The diversity of the microbes that can affect the water systems is vast. In the majority of cases, the test to determine which microbial species is the causative agent for disease or infection is too complex to be performed on-site. It is therefore accepted that indicator organisms can be used to monitor the microbiological trends within a water system: using them as the trigger for changing biocide dosing and further investigative work.

A full range of agar dipslides is available for semi-quantitative determination of aerobic and anaerobic bacteria populations in industrial and recreational waters.

The Lovibond® system is a simple, reliable technique which enables the rapid, confirmed enumeration of both total *Coliforms* and pathogenic *E.coli*.

- *Legionella* results within 25 minutes (excluding filtration step)
- Quick results and easy-to-use
- Different form of kits available for different applications and sensitivity
- 18 months shelf-life at room temperature

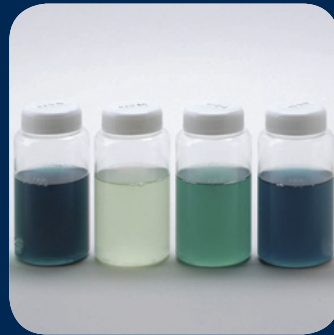
MICROBIOLOGY

The Lovibond® DI 10 Incubator is designed for the reliable incubation of bacteriological slides, on-site, in a laboratory or even while mobile in a car or van.

Dipslides



Coliforme/E.coli Test Kit



Legionella Test



Dipslide Incubator



Tintometer GmbH

Lovibond® Water Testing
Schleefstraße 8-12
44287 Dortmund
Tel.: +49 (0)231/94510-0
Fax: +49 (0)231/94510-20
sales@tintometer.de
www.lovibond.com
Germany

The Tintometer Limited

Lovibond House / Solar Way
Solstice Park / Amesbury, SP4 7SZ
Tel.: +44 (0)1980 664800
Fax: +44 (0)1980 625412
water.sales@tintometer.com
www.lovibond.com
UK

Tintometer AG

Hauptstraße 2
5212 Hausen AG
Tel.: +41 (0)56/4422829
Fax: +41 (0)56/4424121
info@tintometer.ch
www.tintometer.ch
Switzerland

Tintometer Inc.

6456 Parkland Drive
Sarasota, FL 34243
Tel.: +1 941 756 6410
Fax: +1 941 727 9654
service@orbeco.com
www.orbeco.com
USA

Tintometer China

Room 1001, China Life Tower
16 Chaoyangmenwai Avenue,
Beijing, 100020
Tel.: +86 10 85251111 App. 330
Fax: +86 10 85251001
China

Tintometer South East Asia

Unit B-3-12, BBT One Boulevard,
Lebuh Nilam 2, Bandar Bukit Tinggi,
Klang, 41200, Selangor D.E
Tel.: +60 (0)3 3325 2285/6
Fax: +60 (0)3 3325 2287
lovibond.asia@tintometer.com
www.lovibond.com
Malaysia

Technical changes without notice
Printed in Germany 05/13
No.: 93 81 60

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^{a)} for more information and further tests see: www.loviibond.com