

Lovibond® Water Testing

Tintometer® Group



MD 100 Colorimeters



For Boiler & Cooling Water Applications

- Application specific instruments – only the tests you need
- Ideal for systems control and optimization of water quality
- Utilizes Lovibond® Powder Pack, Tablet and Liquid Reagents

www.lovibond.com

Optimize Processes in Cooling and Boiler Water Systems

There are many starting points for ensuring the efficiency and operational safety of cooling and boiler water systems. An essential point is the testing and monitoring of the water which is used. Only minor deviations from the minimum requirements can serious consequences and severely impair the system. Prevent increased wear, poor efficiency and system shutdowns. We have developed the MD 100 Boiler Water and MD 100 Cooling Water colorimeter systems specifically for this purpose, as custom solutions tailored to your needs.

Each colorimeter has a dedicated range of application-specific tests. With the same degree of accuracy and repeatability, they are ideal for the operator who requires a multi-parameter instrument, without the need to invest in a high-end, all-encompassing product. Combining additional tests for pH, conductivity and other titration tests such as alkalinity, hardness and sulfate, the user can request a complete analysis set. The colorimeters are supplied pre-calibrated with test methods; simply add the appropriate Lovibond® reagent sets (tablets, powder packs and liquids).

MD 100 Boiler Water

Most faults in steam production plants occur as a result of deficient monitoring and control of the boiler water. This includes, in particular, the formation of boiler scale, corrosion and local overheating. Therefore, regular treatment and testing of the boiler water is indispensable. By using the MD 100 Boiler Water colorimeter system, you have an overview of the key parameters of your boiler water and can perform purposeful water treatment at all times.

MD 100 Cooling Water

Scale, corrosion, deposits and damage due to micro-organisms (biofilms) are just some of the factors which can seriously impair cooling water systems. There is no need to let it come to that, because only a few minor corrections will usually result in a considerable improvement in water quality and thus drastically reduced operating costs and long-term prevention of downtimes. The Colorimeter MD 100 Cooling Water is just the right system for this purpose. It tests your water parameters quickly, easily and precisely.



Delivery Content

- Instrument in carrying case
- Four AAA batteries
- Three x 24 mm sample cell w/ lid
- Three x 16 mm sample cell w/ lid
- Two x Dilution Tubes
- 13 mm adapter
- 16 mm adapter
- Two x 20 ml syringe
- One stirring rod and one brush
- Warranty Information
- Certificate of Conformity
- Instruction Manual

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Specifications

Optics	LEDs, interference filters (IF) and photo sensor in transparent sample chamber
Wavelength Accuracy	± 1 nm
Photometric Accuracy	3% FS (T = 20°C – 25°C)
Photometric Resolution	0.01 A
Power Supply	4 micro batteries (AAA), capacity approx. 17 hours or 5000 tests
Auto - OFF	automatic switch-off after 10 minutes of non-use
Display	backlit LCD (on keypress)
Storage	internal ring memory for 16 data sets
Interfaces	infrared interface for test data transfer
Additional Features	real time clock and date
Calibration	factory calibration and user calibration. Reset to factory calibration possible
Dimensions	155 x 75 x 35 mm (L x W x H)
Weight	basic unit approx. 260 g
Environmental Conditions	temperature: 5 – 40 °C rel. humidity: 30 – 90% (non condensing)
CE-Conformity	

1) tested with standard solutions

Ordering Information

Description	Part Number
MD 100 Boiler Water	27 62 30
MD 100 Cooling Water	27 62 40

Delivery without reagents

MD 100 Colorimeters for Boiler & Cooling Water

Boiler	Cooling	Parameter	Range	Method	Reagent(s)	Qty	Reagent P/N
■	■	Aluminum	0.1 - 0.25 mg/l	Eriochrome Cyanine R	VARIO Aluminum Reagent Set	100 Tests	53 50 00
	■	Bromine	0.05 - 13 mg/l	DPD / Glycine	Combi-Pack: DPD No. 1 / DPD No. 3 Glycine Tabet (required if testing in presense of chlorine)	100 EA 100 Pack	51 77 11 BT 51 21 70 BT
■		Chloride	0.5 - 20 mg/l	Mercury Thiocyanate /Iron Nitrate	Chloride Reagent Set	50 Tests	56R018490
	■	Chlorine	0.01 - 6.0 mg/l	DPD	Combi-Pack: DPD No. 1 / DPD No. 3	100 EA	51 77 11 BT
	■	Chlorine	5 - 200 mg/l	KI / Acid	Combi-Pack: Chlorine HR (KI) Acidifying GP	100 EA	51 77 21 BT
	■	Chlorine Dioxide	0.02 - 11 mg/l	DPD / Glycine	Combi-Pack: DPD No. 1 / DPD No. 3 Glycine Tabet (required if testing in presense of chlorine)	100 EA 100 Pack	51 77 11 BT 51 21 70 BT
■	■	Copper	0.3 - 5.0 mg/l	Biquinoline	Combi-Pack: Copper No. 1 / No. 2	100 Tests	51 76 91 BT
■		DEHA	20 - 500 µg/l	PPST	VARIO DEHA Reagent Set	100 Tests	53 60 00
■		Hydrazine	50 - 500 mg/l	Dimethylamino-benzaldehyde	Hydrazine Reagent Set	30 Tests	51 78 30
■	■	Iron	0.03 - 2 mg/l	Ferrozine / Thioglycolate	Iron Reagent Set	50 Tests	56R018990
	■	Molybdate	0.03 -3.0 mg/l	Mercaptoacetic Acid	VARIO LR Molybdate Reagent Set, F20 Required Accessory: Mixing Cylinder, 25 ml (Glass)	100 Tests 1 EA	53 54 50 19 80 26 50
	■	Molybdate	0.06 - 60 mg/l	Thioglycolate	Thioglycolate Reagent, KS63	50 tests	56L006365
■		Oxygen, Dissolved	10 - 800 µg/l	Rhodazine D™	Dissolved Oxygen Ampoule (Vacu-Vial®) Adapter for Vacu-Vial®	30 CT 1 EA	38 04 50 19 20 75
	■	Ozone	0.02 - 2 mg/l	DPD / Glycine	Combi-Pack: DPD No. 1 / DPD No. 3 Glycine Tabet (required if testing in presense of chlorine)	100 EA 100 Pack	51 77 11 BT 51 21 70 BT
■		Phosphate	5 - 80 mg/l	Vanadomolybdate	Phosphate Reagent Set	50 Tests	56R019090
■	■	Polyacrylate	1 - 30 mg/l	Turbidity	Polyacrylate Reagent Set	50 Tests	56R019165
■		Silica	1 - 90 mg/l	Silicomolybdate	VARIO Silica HR Reagent Set, 10 ml Sample	100 Tests	53 57 00
	■	Sulfate	5 - 100 mg/l	Bariumsulfate Turbidity	VARIO Sulfa 4 Reagent, F10	100 CT	53 21 60
	■	Triazole	1 - 16 mg/l	Catalyzed UV Digestion	VARIO Triazole Reagent, F25	100 CT	53 22 00
	■	Zinc	0.1 - 2.5 mg/l	Zincon / EDTA	Zinc Reagent Set	50 Tests	56R023965

Ordering Information

Description	Part Number	Description	Part Number
Set of 12 round vials with lid Height 48 mm, Ø 24 mm, glass	19 76 20	Membrane filter set 25 membrane filters, 0.45 µm, 2 syringes 20 ml	36 61 50
Set of 5 round vials with lid Height 48 mm, Ø 24 mm, glass	19 76 29	Cleaning cloth for vials	19 76 35
Set of 10 round vials with lid Height 90 mm, Ø 16 mm, glass	19 76 65	Set of 12 sealing rings for round vial ø 24 mm	19 76 26
Adapter for round vials ø 16 mm	19 80 21 90	Tablet Crusher, 13 cm length	36 41 00
Vial stand for 6 round vials Ø 24 mm, acrylic glass	41 89 51	Tablet Crusher, 10 cm length	36 41 09
Vial stand for 10 vials (Ø 16 mm or □ 13.5 mm), acrylic glass	41 89 57	IRiM - Data Transfer Module	21 40 50
Mixing cylinder, 25 ml, with stopper required accessory for molybdenum LR test	19 80 26 50	EZ Mix Primary Chlorine Standard Kit Confirms the value of 1.5 mg/l	36 61 60

Make A Complete Test Kit!

SD Series

Instruments in the SD Series of E-Chem Testers are ideal for field testing in environmental or industrial settings. The robust housing is waterproof and the intuitive scroll-bar functionality combined with a backlit display make them easy to use and calibrate.

Description	Part Number
SD 50 pH Tester	19 48 00
SD 60 Redox Tester	19 48 01
SD 70 Conductivity Tester	19 48 02
SD 80 TDS Tester	19 48 03
SD 90 Salt Tester	19 48 04



Legionella Detection Test Kit

These test kits are easy to use and give accurate positive/negative results within 25 minutes.

Ideal for source detection and confirming the impact of remedial actions.

Description	Part Number
Single Test Kit	56B006601
Field Test Kit	56B006001
Systems Test Kit	56B006101
Swab Test Kit	56B006401
Enterprise Test Kit	56B006501

Non-Oxidizing Biocide Test Kits

Use these test kits to control microbiological activity in a wide range of water systems. Biocidal performance is concentration dependent, so it is essential to monitor the activity levels closely.

Description	Part Number
Bronopol Test Kit	56K001101
DPNPA Test Kit	56K001201
Isothiazoline Test Kit	56K001401
MBTC Test Kit	56K001501
THPS Test Kit	56K001601
Quats / Polyquat / Amine Test Kit	56K001701
Bardac 22 Test Kit	56K001801



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