

# Lovibond® Water Testing

## Tintometer® Group



### Comparator 2000+

More than 400 different test discs available



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

Part Number: 142000

#### Usable in different applications

The Comparator 2000+ is versatile: it is used in swimming pools as well as in research centers, universities or general drinking water treatment.

#### Daylight lamp

So that you can always measure safely and stably under unfavorable visibility conditions, we recommend the use of the (optional) mains or battery-powered daylight lamp. So the lighting conditions always remain the same. No matter where you are measuring.

#### Various analyses possible

For the Comparator 2000+, more than 400 color discs and numerous reagents are available. Your combination is guaranteed. And if you have to change them once, it works without opening the comparator.

#### Integrated prism

The integrated prism visually brings the glass standards of the color disc and the colored sample into view.

#### Industry

Chemical Industry | Food and Beverage Industry | Industries Others | Municipalities | NGO | Oil and Gas | Pharmaceutical Industry | Pool Public | Pool Services | Power and Energy

#### Application

Beer, Malts and Caramels | Boiler Water | Chemicals | Coatings | Cooling Water | Disinfection Control | Drinking Water Treatment | Edible Oils and Fats | Food and Beverage | Galvanization | Petroleum Oils and Waxes | Pool Water Control | Pool Water Treatment | Waste-Water Treatment

#### Comparator 2000+

The Comparator 2000+ is a versatile colorimetric system for water analysis. Comfortable handling, no compromise on accuracy and reproducibility: The Comparator 2000+ can be used for many applications. Swimming pools, research or drinking water treatment are just a few examples.

## Measuring Range

Test Name	Measuring Range	Chemical Method
	0 - 30 mg/l Pt	(APHA) Platinum Cobalt Standard Method
	10 - 90 mg/l Pt	(APHA) Platinum Cobalt Standard Method
	30 - 70 mg/l Pt	(APHA) Platinum Cobalt Standard Method
	50 - 500 mg/l Pt	(APHA) Platinum Cobalt Standard Method
	70 - 250 mg/l Pt	(APHA) Platinum Cobalt Standard Method
Aluminium T	0 - 0.5 mg/l Al	Eriochrom Cyanine R
Amine	0 - 2 mg/l NH <sub>3</sub>	Methyl Orange
Amine T	1.0 - 10 mg/l NH <sub>3</sub>	Bromocresol Green
Ammonia Nes. L	0.02 - 0.2 mg/l N	
Ammonia Nes. L	0.2 - 0.52 mg/l N	
Ammonia Nes. L	0.56 - 1.2 mg/l N	
Ammonia Nes. L	1.2 - 2.0 mg/l N	
Ammonia T	0 - 0.4 mg/l N	Indophenole Blue
Ammonia T	0 - 1.0 mg/l N	Indophenole Blue
Ammonia T	0 - 10 mg/l N	Indophenole Blue
Bromine T	0.2 - 2.0 mg/l Br <sub>2</sub>	DPD
Bromine T	0.5 - 6.0 mg/l Br <sub>2</sub>	DPD
Bromine T	1.0 - 10 mg/l Br <sub>2</sub>	DPD
Chlorine dioxide T	0.04 - 0.57 mg/l ClO <sub>2</sub>	DPD
Chlorine dioxide T	0.19 - 1.9 mg/l ClO <sub>2</sub>	DPD
Chlorine dioxide T	0.25 - 5.0 mg/l ClO <sub>2</sub>	Potassium Iodide
Chlorine dioxide T	0.38 - 1.52 mg/l ClO <sub>2</sub>	DPD
Chlorine HR T	2.0 - 10 mg/l Cl <sub>2</sub>	Potassium Iodide
Chlorine HR T	5.0 - 50 mg/l Cl <sub>2</sub>	Potassium Iodide
Chlorine HR T	5.0 - 250 mg/l Cl <sub>2</sub>	Potassium Iodide
Chlorine L	0.01 - 0.1 mg/l Cl <sub>2</sub>	DPD
Chlorine L	0.1 - 1.0 mg/l Cl <sub>2</sub>	DPD
Chlorine L	0.1 - 1.0 mg/l Cl <sub>2</sub>	DPD
Chlorine L	0.1 - 2.0 mg/l Cl <sub>2</sub>	DPD
Chlorine L	0.02 - 0.2 mg/l Cl <sub>2</sub>	DPD
Chlorine L	0.02 - 0.3 mg/l Cl <sub>2</sub>	DPD
Chlorine L	0.2 - 0.8 mg/l Cl <sub>2</sub>	DPD
Chlorine L	0.2 - 4.0 mg/l Cl <sub>2</sub>	DPD
Chlorine L	0.05 - 0.5 mg/l Cl <sub>2</sub>	DPD
Chlorine L	1.0 - 4.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.01 - 0.1 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.1 - 1.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.1 - 1.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.1 - 1.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.1 - 2.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.1 mg/l Cl <sub>2</sub>	o-Tolidine
Chlorine T	0.02 - 0.2 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.02 - 0.3 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.02 - 0.5 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.2 - 0.8 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.2 - 4.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.05 - 0.5 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.5 - 4.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.5 - 6.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	0.15 - 2.0 mg/l Cl <sub>2</sub>	o-Tolidine
Chlorine T	1.0 - 4.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	1.0 - 5.0 mg/l Cl <sub>2</sub>	o-Tolidine

Test Name	Measuring Range	Chemical Method
Chlorine T	1.1 mg/l Cl <sub>2</sub>	DPD
Chlorine T	1.5 mg/l Cl <sub>2</sub>	DPD
Chlorine T	2.0 - 5.0 mg/l Cl <sub>2</sub>	DPD
Chlorine T	2.0 - 10 mg/l Cl <sub>2</sub>	DPD
Chromium L	0.4 - 4.0 mg/l Cr	Diphenylcarbazide
Copper HR T	0 - 4.0 mg/l Cu	Zincon
Copper LR T	0 - 1.0 mg/l Cu	Zincon
DEHA L	0.016 - 0.16 mg/l DE-HA	PPST
Fluoride T	0 - 1.6 mg/l F <sup>-</sup>	SPADNS
H <sub>2</sub> O <sub>2</sub> LR T	0.1 mg/l H <sub>2</sub> O <sub>2</sub>	DPD / Catalyst
H <sub>2</sub> O <sub>2</sub> LR T	0.01 mg/l H <sub>2</sub> O <sub>2</sub>	DPD / Catalyst
H <sub>2</sub> O <sub>2</sub> LR T	0.05 - 0.5 mg/l H <sub>2</sub> O <sub>2</sub>	DPD / Catalyst
Hardness total P	0 - 60 mg/l CaCO <sub>3</sub>	Murexide
Hydrazine L	0 - 0.4 mg/l N <sub>2</sub> H <sub>4</sub>	PDMAB
Hydrazine L	0 - 1.0 mg/l N <sub>2</sub> H <sub>4</sub>	PDMAB
Hydrazine P	0 - 0.5 mg/l N <sub>2</sub> H <sub>4</sub>	PDMAB
Hydrazine P	0.02 - 0.2 mg/l N <sub>2</sub> H <sub>4</sub>	PDMAB
Iodine T	0.4 - 3.6 mg/l I	DPD
Iodine T	0.7 - 14 mg/l I	DPD
Iron	0.01 - 0.1 mg/l Fe	PPST
Iron HR T	1.0 - 10 mg/l Fe	PPST
Iron LR T	0.1 - 1.0 mg/l Fe	PPST
Iron LR T	0.02 - 0.3 mg/l Fe	PPST
Mn T	0 - 4.0 mg/l Mn	Formaloxime
Molybdate HR T	5.0 - 50 mg/l MoO <sub>4</sub>	Thioglycolate
Molybdate HR T	10 - 150 mg/l MoO <sub>4</sub>	Thioglycolate
Molybdate L P	0 - 10 mg/l MoO <sub>4</sub>	TRION
Nitrate T	0.1 - 1.0 mg/l N	Zinc Reduction / NED
Nitrate T	10 - 100 mg/l N	Diazonium Reaction
Nitrite L	0.001 - 0.02 mg/l N	N-(1-Naphthyl)-ethylen-diamine
Nitrite LR T	0.002 - 0.05 mg/l N	N-(1-Naphthyl)-ethylen-diamine
Nitrite LR T	0.05 - 0.5 mg/l N	N-(1-Naphthyl)-ethylen-diamine
Oxygen dissolved L	2.0 - 12 mg/l O <sub>2</sub>	
Ozone T	0 - 0.5 mg/l O <sub>3</sub>	Potassium Indigothiosul-fonate
Ozone T	0.01 - 0.1 mg/l O <sub>3</sub>	DPD
Ozone T	0.1 - 1.0 mg/l O <sub>3</sub>	DPD
Ozone T	0.05 - 0.45 mg/l O <sub>3</sub>	DPD
Phosphate HR T	0 - 40 mg/l P	Vanadomolybdate
Phosphate HR T	0 - 100 mg/l P	Vanadomolybdate
Phosphate L	0 - 80 mg/l P	Ammonium Molybdate / Hydroquinone
Phosphate L	10 - 100 mg/l P	Vanadomolybdate
Phosphate LR T	0 - 4.0 mg/l P	Phosphomolybdenum Blue
Phosphate L T	0.2 - 2 mg/l PO <sub>4</sub>	Ammonium Molybdate / Potassium Antimonyl Tartrate / Ascorbic Acid
pH value L	4.0 - 11	Universal Mixing Indica-tor
pH value L	6.0 - 7.6	Bromothymol Blue
pH value L	8.0 - 9.6	Thymol Blue
pH value T	1.0 - 2.6	Cresol Purple
pH value T	1.2 - 2.8	Thymol Blue
pH value T	2.8 - 4.4	Bromophenol Blue
pH value T	3.6 - 5.2	Bromocresol Green
pH value T	4.4 - 6.0	Methyl Red
pH value T	5.2 - 6.8	Bromocresol Purple

Test Name	Measuring Range	Chemical Method
pH value T	6.0 - 7.6	Bromothymol Blue
pH value T	6.8 - 8.4	Phenol Red
pH value T	7.0 - 8.0	Phenol Red
pH value T	7.2 - 8.8	Cresol Red
pH value T	7.6 - 9.2	Cresol Purple
pH value T	8.0 - 9.6	Thymol Blue
QAC HR T	0 - 200 mg/l QAC	Sulphonophthaleine
QAC LR T	0 - 20 mg/l QAC	Sulphonophthaleine
Silica L	0.1 - 1.0 mg/l SiO <sub>2</sub>	Silicomolybdate
Silica L	0.2 - 1.0 mg/l SiO <sub>2</sub>	Silicomolybdate
Silica L	1.0 - 20 mg/l SiO <sub>2</sub>	Silicomolybdate
Silica L	2.5 - 25 mg/l SiO <sub>2</sub>	Silicomolybdate
Silica T	0.4 - 4.0 mg/l SiO <sub>2</sub>	Silicomolybdate
Silica T	1.0 - 10 mg/l SiO <sub>2</sub>	Silicomolybdate
Sodium hypochlorite T	2 - 16 % NaOCl	Potassium Iodide
Sugar	0 - 100	
Sulphide T	0 - 0.5 mg/l S <sup>2-</sup>	DPD / Catalyst
Zinc HR T	0 mg/l Zn	Zincon / EDTA
Zinc LR T	0 mg/l Zn	Zincon / EDTA

## Accessories

Title	Part Number
Bulb for Daylight cabinet 2000	124100
Daylight cabinet, battery operated	142050
Diffuser plate for cell holder	142070
Plastic cell, 13,5 mm path length, with grey lid, set of 10	145500
Plastic cell, 13,5 mm path length, with grey lid, set of 5	145505
Plastic cell, 13,5 mm path length, with grey lid, set of 100	145510
Water sampler, AF 631	170500
Daylight cabinet, mains operated	171010
External power supply	182049
Lamp 2.5 V, 200 mA for Daylight cabinet TK 102 (change in pairs)	332279
Extraction tube AF 260	352600
Glass cell, 13,5 mm path length, with white lid, DB 424/S, set of 5	354243
Stopper for glass cell DB 424/S, white	354250
Stopper for W 680/OG/40 glass cell, 40 mm path length	354270
Glas stirring rod, 20 cm length	364080
Stirring rod, 13 cm length	364100
Stirring rod, 10 cm length	364109
Glas stirring rod, 10 cm length	364110
Stirring rod, 13 cm length, set of 10	364120
Stirring rod, 10 cm length, set of 10	364130
500 ml bottle, AF 631	375069
Cleaning brush, 20 cm length	380030
Brush, 11 cm length	380230
Cuvette stand for 10 round cuvettes Ø 16 mm	418957
W 680/OG/2,5 glass cell, 2,5 mm path length	606780
W 680/OG/5 glass cell, 5 mm path length	606790
W 680/OG/13 glass cell, 13 mm path length	606820
W 680/OG/13,5 glass cell, 13,5 mm path length	606830
W 680/OG/25 glass cell, 25 mm path length	606860
W 680/OG/26 glass cell, 26 mm path length	606870
W 680/OG/40 glass cell, 40 mm path length	606890

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