Tintometer®-Group

Comparator 2000+



The system for colorimetric water analysis



With its accessories, the Lovibond® Comparator system 2000 is an extremely versatile, modular system for testing water. It is simple to use yet is uncompromising in terms of precision and reproducibility of results. It is compact and portable. The integrated prism brings the glass standards of the test discs and the coloured sample into the same field of view.

Test discs

The required accuracy of results is only ensured if stable, fade-free colour standards are used.

Glass colour standards are fade-free, resistant to chemicals and scratchproof. Lovibond® standards are made from coloured glass filters. They comply with international standards, e.g. ISO 7393/2.

Please see the table on page 28 for information on the various test discs or refer to our **L 213 test disc catalogue**.

Lighting unit

We recommend the use of the battery-operated Lovibond® lighting unit in variable lighting conditions. This guarantees uniform lighting conditions, and ensures greater test accuracy.

Cells

We manufacture precision plastic and optical glass cells in line with the highest quality standards. The cells ensure high precision and reproducibility of results.



Comparator 2000+





Lighting unit TK 102



Nessleriser with lighting unit

Order codes see page 27

Applications

- Water Treatment (e.g. Drinking Water)
- Pool-Water
- Research Centres
- Universities
- Special Applications
- Laboratory and Field Testing

Tintometer®-Group

Comparator 2000+ Test Kits

Complete kits for water analysis

Scope of delivery for standard kits

Comparator test kits are supplied as a complete system in a sturdy plastic case. Together with the Comparator 2000+ and test discs, each kit includes all the necessary cells, accessories and Lovibond® tablet reagents (for 100 measurements) to achieve reliable results.

The table to the right shows a selection of the most popular standard test kits.

Customised equipment

In addition to supplying standard test kits, we can construct customised kits to suit individual requirements.

Based on the desired test parameters and measuring ranges we will draw up a detailed offer to suit your application.

Optional accessory

All test kit versions allow integration of the battery-operated portable lighting unit TK 102 and charger TK 102/ 1.

Operating instructions

The operating instructions provide a step-by-step explanation of how to conduct the water test, ensuring that even "non-chemists" can achieve reliable and accurate measurements in the minimum of time.



Example of a comparator test kit, together with daylight unit

Туре	Designation/Combi	Test	Range*	Code
AF 270	Mini Lab Pool Water	Aluminium Ammonia Chlorine Chloride Stabilizer Iron pH-value	0 - 0.5 mg/l Al 0 - 0.4 mg/l N 0.1 - 1.0 mg/l Cl ₂ 1.0 - 4.0 mg/l Cl ₂ 5 - 5000 mg/l Cl 0 - 80 mg/l 0.1 - 1.0 mg/l Fe 5.2 - 6.8 pH	41 27 00
		Alkalinity-M Sulphate	6.8 - 8.4 pH 20 - 800 mg/l CaCO ₃ 40 - 4000 mg/l SO ₄	
AF 357	Drinking Water	Chloride (salinity) Chlorine Hardness Total Fluoride Hazen Colour pH-value	0 - 5000 mg/l Cl 0.02 - 0.3 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0 - 500 mg/l CaCO ₃ 0 - 1.6 mg/l F 10 - 90 mg/l Pt 6 - 8.4 pH	41 35 70
AF 358	Sewage and Domestic Effluents	Ammonia Chlorine Nitrite Permanganate (BOD) pH-value Sulphide	0 - 1 mg/l N 0.1 - 1 mg/l Cl ₂ 1 - 10 mg/l Cl ₂ 0.05 - 0.5 mg/l N 0 - 60 mg/l 4 - 8 ; 8 - 9.6 pH 0 - 0.5 mg/l S	41 35 80
AF 368	Mini Lab Heavy Metals	Chromium Copper Cyanide Nickel	10 - 100 μg Cr 2.5 - 50 μg Cu 0.05 - 1 mg/l Cn 1 - 10 mg/l	41 36 80
		Zinc	0 - 50 μg Zn	
Туре	Designation/Single	Test	0 - 50 μg 2n Range*	Code
Type AF 274	Designation/Single Amine		. 5	Code 41 27 40
•		Test	Range*	
AF 274	Amine	Test Amine	Range* 1 - 10 mg/l	41 27 40
AF 274 AF 112A	Amine Chlorine free, comb. tot.	Test Amine Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂	41 27 40 41 11 20
AF 274 AF 112A AF 112B	Amine Chlorine free, comb. tot. Chlorine free, comb. tot.	Test Amine Chlorine Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂	41 27 40 41 11 20 41 11 30
AF 274 AF 112A AF 112B AF 112E	Amine Chlorine free, comb. tot. Chlorine free, comb. tot. Chlorine free, comb. tot.	Test Amine Chlorine Chlorine Chlorine Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂	41 27 40 41 11 20 41 11 30 41 12 50
AF 274 AF 112A AF 112B AF 112E AF 112E/F	Amine Chlorine free, comb. tot. Chlorine free, comb. tot. Chlorine free, comb. tot. Chlorine free, comb. tot.	Test Amine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.2 - 0.8 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂	41 27 40 41 11 20 41 11 30 41 12 50 41 11 26
AF 274 AF 112A AF 112B AF 112E AF 112E/F AF 112J/J	Amine Chlorine free, comb. tot.	Test Amine Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.02 - 0.8 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 6.8 - 8.4 pH 0.1 - 1.0 mg/l Cl ₂	41 27 40 41 11 20 41 11 30 41 12 50 41 11 26 41 72 46
AF 274 AF 112A AF 112B AF 112E AF 112E/F AF 112I/J AF 112N/T	Amine Chlorine free, comb. tot.	Test Amine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine pH-value Chlorine Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 1.1 - 2.0 mg/l Cl ₂	41 27 40 41 11 20 41 11 30 41 12 50 41 11 26 41 72 46 41 01 20
AF 274 AF 112A AF 112B AF 112E AF 112E/F AF 112I/J AF 112N/T AF 112ED AF 112	Amine Chlorine free, comb. tot.	Test Amine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine Chlorine pH-value Chlorine Chlorine Chlorine Chlorine Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.02 - 0.8 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 1.0 mg/l Cl ₂ 1.1 - 2.0 mg/l Cl ₂	41 27 40 41 11 20 41 11 30 41 12 50 41 11 26 41 72 46 41 01 20 41 00 01
AF 274 AF 112A AF 112B AF 112E AF 112E/F AF 112I/J AF 112N/T AF 112ED AF 112 AF 112ED	Amine Chlorine free, comb. tot. Chlorine dioxide Chlorine dioxide	Test Amine Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.02 - 0.8 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 1.0 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 1.0 mg/l Cl ₂ 1.1 - 2.0 mg/l Cl ₂ 0.1 - 1.0 mg/l Cl ₂ 0.1 - 1.0 mg/l Cl ₂ 1.1 - 2.0 mg/l Cl ₂ 0.1 - 1.52 mg/lClO ₂	41 27 40 41 11 20 41 11 30 41 12 50 41 11 26 41 72 46 41 01 20 41 00 01 41 00 07
AF 274 AF 112A AF 112B AF 112E AF 112E/F AF 112I/J AF 112N/T AF 112ED AF 112 AF 112 AF 116A	Amine Chlorine free, comb. tot. Chlorine dioxide Chlorine dioxide Chlorine, pH	Test Amine Chlorine dioxide Chlorine Chlorine Chlorine Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.02 - 0.8 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 1.0 mg/l Cl ₂ 0.04 - 0.57 mg/lClO ₂ 0.04 - 1.52 mg/lClO ₂ 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂	41 27 40 41 11 20 41 11 30 41 12 50 41 11 26 41 72 46 41 01 20 41 00 01 41 00 07 41 11 40
AF 274 AF 112A AF 112B AF 112E AF 112E/F AF 112I/J AF 112N/T AF 112ED AF 112 EF/ED AF 116A AF 116B	Amine Chlorine free, comb. tot. Chlorine dioxide Chlorine dioxide Chlorine, pH Chlorine, pH	Test Amine Chlorine dioxide Chlorine pH-value Chlorine pH-value Chlorine pH-value Chlorine	Range* 1 - 10 mg/l 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0.02 - 0.3 mg/l Cl ₂ 0.02 - 0.8 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 2.0 mg/l Cl ₂ 0.1 - 1.0 mg/l Cl ₂ 0.04 - 0.57 mg/lClO ₂ 0.04 - 1.52 mg/lClO ₂ 0.1 - 1 mg/l Cl ₂ 0.2 - 4 mg/l Cl ₂ 0.3 - 4 mg/l Cl ₂ 0.1 - 1 mg/l Cl ₂	41 27 40 41 11 20 41 11 30 41 12 50 41 11 26 41 72 46 41 01 20 41 00 01 41 00 07 41 11 40 41 11 60

^{*} Disc readings see following pages



Comparator 2000+ and Accessories

Туре	Item	Code
TK 100	Lovibond® Comparator 2000+	
TK 102	Portable lighting unit, battery operated	14 20 50
	Daylight Unit for Comparator 2000+, mains operated	17 10 10
AF 631	Water sampler with two 500 ml bottles and one lid	17 05 00
DB 426	Cell stand for 10 cells-13.5 mm, path length	17 02 60
	Glass stirring rod, 12 cm length	
	Plastic stirring rod, 13 cm length	36 41 00
	Brush, 11 cm length	38 02 30

Glass Cells

Туре	Item	Code
DB424/S	5 glass cells, 13.5 mm path length, calibrated at 2 – 12 ml, with lids	35 42 43
W 680/40	Glass cell 40 mm path length, calibrated at 20 ml	60 68 90

Plastic Cells

5 plastic cells, frosted on two sides,	14 55 05
13.5 mm path length, volume 10 ml, with lid	
10 plastic cells, as 14 55 05	14 55 00
100 plastic cells, as 14 55 05	14 55 10

Nessleriser System and Accessories

Туре	Item	Code
2150	Nessleriser 2150 with stand, daylight unit and AF 306/P	17 20 30
2150	Nessleriser 2150 with stand	17 21 50
2150	Nessleriser 2150 upgrade kit	17 21 60
2250	Nessleriser 2250 with stand, daylight unit and DB 420	17 20 40
2250	Nessleriser 2250 with stand	17 22 50
2250	Nessleriser 2250 upgrade kit with Nessler tubes DB 420	17 21 70
	Daylight Unit for Nessleriser, mains operated	17 10 20
	Stand for Nessleriser upgrade kit	17 21 80
AF 306/S	Stand for 12 Nessler tubes	17 02 90
AF 306	Pair Nessler tubes, 113 mm	35 30 60
AF 306/P	Pair Nessler tubes, 113 mm with plungers	35 30 80
	Plunger for Nessler tube AF 306 and AF 306/P	35 30 70
DB 420	Pair Nessler tubes, 250 mm with plungers	35 42 00
	Plunger for Nessler tube DB 420	35 42 29
AF 315	Special Nessler tube (determination of oxygen with disc NO	E) 35 31 50



Glass cell with lid, volume 10 ml, calibrated 2 - 12 ml, path length 13,5 mm, Pack of 5, code: 35 42 43