

WASH Water Testing Kits

1. Palintest – Contour Comparator

The contour comparator is a visual testing colorimetric testing kit. The handheld meter provides fast results and it aligns the sample color and the disc color for easy comparison. The kit uses



Figure 1 - Palintest Contour Comparator Kit

the DPD method to provide a clear contour development.

The comparator has more than 40-disc options which can be selected based on the tests required. The discs are made of fade-free acetate and inks. They are designed to be accurate for 10 years, given that they are stored in a cool and dark place. Continuous exposure to intense UV light sources may cause premature fading. The outer clear casing can be stained or blemished if exposed to solvents, chemical reagents or abrasive surfaces.

Discs are available in single and dual parameters which provide the option for two measurement ranges. Each kit contains the instrument discs, cuvettes, brush, stirring rods and reagents needed to complete 30 tests. The measurement ranges are tabulated below.

Table 1 - Palintest Contour Comparator Single Parameter Kit Measurement ranges

Parameter	Measurement Range	Single Parameter Kit (includes 30 tests)	Replacement Discs (each)
Alkalinity	0 - 250 mg/L CaCO ₃	CKH1192	-
Aluminium	0 - 0.5 mg/L Al	CKH1166	CKD1166
Ammonia	0 - 1 mg/L N	CKH1152	CKD1152
Bromine	0-8 mg/L Br ₂	CKD1005	CKD1005
Chlorine - (DPD 1, Free)	0 - 5 mg/L Cl ₂	CKH1001	CKD1001
Chlorine - Free and Total Chlorine	0 - 2 mg/L Cl ₂	CKH1002	CKD1002
Chlorine - Free and Total Chlorine	0 - 1 mg/L Cl ₂	CKH1003	CKD1003
Chlorine HR	0 - 50 mg/L Cl ₂	CKH162/50	CKD162/50
Chlorine HR	0 - 250 mg/L Cl ₂	CKH 162/250	CKD162/250
Copper	0 - 5 mg/L Cu	CKH1186	CKD1186
Fluoride	0 - 1.5 mg/L F	CKH1179	CKD1179
Hydrogen Peroxide LR	0 - 1 mg/L H ₂ O ₂	CKH1104	CKD1104
Hydrogen Peroxide HR	0 - 100 mg/L H ₂ O ₂	CKH1105	CKD1105
Iron MR	0 - 10 mg/L Fe	CKH1292	CKD1292
Manganese	0 - 0.03 mg/L Mn	CKH1173	CKD1173
Manganese HR	0 - 5 mg/L Mn	CKH1174	CKD1174
Molybdate HR	0 - 100 mg/L MoO ₄	CKH1175	CKD1175
Nitrate	0 - 15 mg/L N	CKH1163	CKD1163
Nitrite	0 - 0.4 mg/L N	CKH1109	CKD1109
Ozone	0 - 1.0 mg/L O ₃	CKH1056	CKD1056
Phosphate LR	0 - 4 mg/L PO ₄	CKH1177	CKD1177
Phosphate HR	0 - 100 mg/L PO ₄	CKH1114	CKD1114
Silica	0 - 4 mg/L SiO ₂	CKH1181	CKD1181
Sulfide	0 - 0.5 mg/L S	CKH1168	CKD1168
Zinc	0 - 4 mg/L Zn	CKH1148	CKD1148
pH Phenol Red	pH 6.8 - 8.4	CKH1131	CKD1131
Universal pH	pH 4 - 11	CKH1006	CKD1006

Table 2 - Palintest Contour Kit Dual-Parameter Kits measurement range

Dual-Parameter Kits	Measurement Range	Part Code
Free & Total Chlorine, Phenol Red	0 - 5 mg/L Cl ₂ and pH 6.8 - 8.4	CKH2001
Free & Total Chlorine, Phenol Red	0 - 2 mg/L Cl ₂ and pH 6.8 - 8.4	CKH2002
Free & Total Chlorine, Phenol Red	0 - 1 mg/L Cl ₂ and pH 6.8 - 8.4	CKH2003
Bromine, pH Phenol Red	0 - 8 mg/L Br ₂ and pH 6.8 - 8.4	CKH2005
Free & Total Chlorine, Chlorine HR	0 - 5 and 0 - 250 mg/L Cl ₂	CKH2006
Free & Total Chlorine, Dual Range	0 - 1 and 0 - 5 mg/L Cl ₂	CKH2007
Hydrogen Peroxide, Dual Range	0 - 1 and 0 - 100 mg/L H ₂ O ₂	CKH2104
Copper and pH Phenol Red	0 - 5 mg/L Cu and pH 6.8 - 8.4	CKH2186

Additional accessories can be purchased based on the ordering information in the table below.

Table 1 - Contour Accessories Ordering Information

Contour Comparator Accessories

Ordering Information	Part Code
Comparator Cuvettes, 10 mL square comparator cuvettes, pack of 5	PT521/5
Dilution Tube, Graduated tube for sample dilution. Graduations at x2, x3, x4, x5, x10	PT512
Cuvette Brush, for cleaning cuvettes, length 120mm	PT663
Crush/Stirring Rods. Pack of 10.	PT502

2. Lovibond – MD 100 Chlorine Powder Reagents

The MD 100 colorimeter is a single parameter colorimeter for water quality analysis. The waterproof instrument is light weight and suitable for field testing or use in the laboratory. The MD 100 remains water tight for up to 1 hour at 0.1 meter. Its optic system utilizes LEDs and interference filters which produces quick and reliable results. The product has a two-year warranty.



Figure 2 - Lovibond MD 100 Kit

The instrument can store 16 readings with time and date stamps and can transfer the results to a spreadsheet using the IRiM accessory.

The instrument is pre-programmed with two testing ranges to test free, total and combined chlorine. Both ranges use the DPD method and operate using the Lovibond Pack Reagent. The instruments are supplied with up to 14 calibration curves.

The Technical Data are tabulated in the table below.

Table 2 - MD 100 Chlorine Technical Data

Optics LEDs, interference filters (IF) and photo sensor in transparent sample chamber. Depending on the version, up to 3 different interference filters are used.
Wavelength specifications of interference filters:
430 nm $\Delta\lambda = 5$ nm
530 nm $\Delta\lambda = 5$ nm
560 nm $\Delta\lambda = 5$ nm
580 nm $\Delta\lambda = 5$ nm
610 nm $\Delta\lambda = 6$ nm
660 nm $\Delta\lambda = 5$ nm

Wavelength Accuracy ± 1

Photometric Range -2500 - 2500 mAbs

Photometric Accuracy 3 % FS (T = 20 °C – 25 °C)

Operation Foil keypad

Display backlit LCD (on keypress)

Suitable Vials Round Cuvettes 24 mm

Calibration factory calibration and user calibration. Reset to factory calibration possible

Interfaces Infrared

Internal Storage internal ring memory for 16 data sets

Power Supply 4 micro batteries (AAA)

Battery Life Time approx. 17 hours

Auto – OFF Yes

Clock Real Time Clock and Date

Portability Portable

Environmental Conditions Temperature: 5 - 40 °C rel. humidity: 30 - 90 % (non condensing)

Compliance CE

Protection Class IP 68

Dimensions 155 x 75 x 35 mm

Weight 260 g

The measuring range is tabulated below.

Table 3 - MD 100 Chlorine Measuring Range

Testparameter	Measuring Range	Method No.	Chemical Method
Chlorine HR PP	0.1 - 8 mg/l Cl ₂	M111	DPD
Chlorine PP	0.02 - 2 mg/l Cl ₂	M110	DPD

The specifications of the reagents used are tabulated in table 6.

Table 4 - Reagents specifications

Title	Measuring Range	Chemical Method	Packaging Unit	Part Number
Chlorine Free DPD F10	0.02 - 2 mg/l Cl ₂ ^{a)}	DPD	Powder / 100 pc.	530100
Chlorine Free DPD F10	0.02 - 2 mg/l Cl ₂ ^{a)}	DPD	Powder / 1000 pc.	530103
Chlorine Total DPD F10	0.02 - 2 mg/l Cl ₂ ^{a)}	DPD	Powder / 100 pc.	530120
Chlorine Total DPD F10	0.02 - 2 mg/l Cl ₂ ^{a)}	DPD	Powder / 1000 pc.	530123

The reference numbers of the accessories are tabulated in table 7 below.

Table 5 - MD 100 accessories reference numbers

ValidCheck Chlorine 1,5 mg/l	48105510
Micro batteries (AAA), set of 4	1950028
Measuring beaker, 100 ml	384801
Stirring rod, 13 cm length	384100
Stirring rod, 13 cm length, set of 10	384120
Stirring rod, 10 cm length	384109
Stirring rod, 10 cm length, set of 10	384130
Mixing cylinder, 25 ml	19802650
Membrane filter set for use when preparing samples, 25 membrane filters 0.45 µm, 2 syringes 20 ml	386150
Plastic funnel with handle (white)	471007
Brush, 11 cm length	380230
Water sampler, AF 631	170500
500 ml bottle, AF 631	375089
Round cuvette 24 mm, set of 12	197820
Round cuvette 24 mm, set of 5	197829
Round cuvette 16 mm, set of 10	197885
Multy cuvette-2, set of 12	197800
Cuvette stand for 6 round cuvettes Ø 24 mm	418951
Cuvette stand for 10 round cuvettes Ø 16 mm	418957
Adapter for round cuvettes 16 mm	19802190
Cleaning cloth	197835
Sealing ring for round vials 24 mm, set of 12	197828
Infrared data transmission modul IRiM	214050
Reference Standard Kit Chlorine - VARIO 0.2 and 1.0	275880
Verification Standard Kit MD 100 / 200	215870
Basic price for calibration certificate for each unit	999845
Additionally for each method	999855

3. Lovibond - Tintometer TB 210 IR

The TB 210 IR is a compact infrared tool for reliable and easy determination of turbidity on-site. The instrument can measure ranges of 0.01 to 1100 NTU which makes it suitable for various applications ranging from drinking water to wastewater.



Figure 3 - Lovibond Tintometer TB 210 IR Kit

The unit can test both colored and colorless water since it operates with infrared light at an angle of 90° to measure turbidity. The measurements are completed in accordance to EN ISO 7027. The standards required for calibration of the unit are supplied. A second adjustment mode allows alternative adjustment with user-defined turbidity standards.

The Technical Data of the product is tabulated below.

Table 6 - Lovibond Tintometer TB 210 IR Technical Data

Portability	Portable
Environmental Conditions	5 - 40 °C at 30 - 90 % relative humidity (non condensing)
Compliance	CE
Dimensions	110 x 55 x 190 mm
Weight	400 g (Basic unit)
Weight with Packaging	(Basic unit)
Suitable Vials	Round Cuvettes 24 mm
Internal Storage	internal ring memory for 16 data sets
Power Supply	9 V-block
Auto - OFF	Yes
Measuring Principle	nephelometric (90° scattered light)
Measuring Range	0,01-1100 NTU (Aurorange)
Clock	Real Time Clock and Date

The kit includes:

- The instrument in its carrying case
- Four turbidity standards (<0.1, 20, 200 and 800 NTU)
- 9V battery
- 2 vials with a diameter of 24 mm and their respective lids
- Warranty information
- Certificate of compliance
- Instruction manual

The reference numbers of the accessories are tabulated below.

Table 7 - Lovibond TB 210 IR accessories reference numbers

Accessories

Title	Part Number
Formazin Stock Solution (4000 NTU), 125 ml	194141
Formazin Stock Solution (4000 NTU), 250 ml	194142
Set turbidity standards T-CAL (<0.1, 20, 200, 800 NTU)	194150
Battery 9 V	1950012
Cleaning cloth	197635
Sample cuvettes with black lid, Height 55 mm, ø 24 mm, set of 12	197655
Sample chamber lid	19801119

4. Palintet - Micro 800 pH, Conductivity and Multiparameter Meter



Features of the Micro 800 include:

- Simplified calibration protocols – automatic calibration standard recognition and temperature compensation with built-in reminders for calibration due

- Full data reporting and recording – memory for up to 500 data sets with time/date stamp, last good calibration record and pH electrode health indication, readings and trend shown on large backlit LCD screen
- Comprehensive kit contents – provided in a hard case with a calibration buffers and standards for immediate use

Suitable for portable or benchtop use, the Micro 800 range is the ideal solution for water quality professionals seeking an advanced system for core measurements.

The measurement ranges are tabulated below.

Table 10 – Micro 800 Multiparameter Meter Measuring Range

	Range	Resolution	Accuracy
pH	-2.00 – 16.00	0.01	±0.01
ORP	-2000 to +2000 mV	0.1 mV (up to ±999.9), 1 mV above	±0.2 mV or ± 0.5%, whichever is greater
Conductivity (EC)	0 to 200,000 µS/cm 0 – 200 mS/cm	0.01 (0 to 99.99 µS/cm) 0.01 (100 – 99.99 mS/cm) 0.1 (100.0 – 200.0 mS/cm)	±1% of full scale or ±1µS/cm, whichever is greater
Total Dissolved Solids (TDS)	0 – 200,000 mg/L 0 – 200 ppt	0.01 (0 – 99.99 mg/L) 0.1 (100.0 – 200.0 ppt)	±1% of full scale or ±1 mg/L, whichever is greater
Salinity	0 – 50.00 ppt	0.01 ppt	±1% of full scale
Temperature	-10 to +110°C	0.1°C	±0.5°C

Table 11 – Micro 800 Multiparameter Meter Ordering Information

Ordering Information	Part Code
Micro 800 pH Meter Kit	PT1330
Micro 800 Conductivity/TDS Meter Kit	PT1340
Micro 800 Multiparameter Meter Kit	PT1350
Replacement pH Electrode (Double Junction)	PT1330PH
Replacement Temperature Probe	PT1330ATC
Optional/Replacement ORP Electrode	PT1330ORP
Replacement Conductivity Probe	PT1340CON