

MD 600 Multi-Parameter Colorimeter



The Lovibond® MD 600 Multi-Parameter Colorimeter is a versatile instrument that tests for a wide range of water quality parameters and is perfect for use in either the field or laboratory.

Using the Lovibond® Tintometer® "Open Reagent System" (which uses VARIO Powder Packs, tablet, liquid and ampule reagents) the MD 600 features an industry-leading 6 LED photo detector array and supports over 120 pre-programmed methods (from Alkalinity through Zinc) and 20 user defined methods.

Highlights

- Over 120 methods
- 8 language options including English, French, Spanish, and Brazilian Portuguese
- 1,000 point data storage with time and date stamp
- User Favorites Menu
- Ideal for lab or field use
- New Method Upload via internet
- Waterproof*
- On-Screen Assistance

* as defined in IP 68, 1 hour at 0.1 meter

Up to 1,000 data sets can be stored in the instrument's internal memory to assure good record keeping, and can be transferred to a computer or printer with the IRIM.

NEW METHOD UPLOAD

- As new methods are developed, users can download updates from our website for free!
- Gives users access to new or alternate methods, updated ranges, and new features
- Never have an "old" instrument again!

VARIETY OF PARAMETERS

- Over 120 pre-programmed parameters, methods, and ranges
- Many parameters offer multiple ranges and methods
- Many parameters have the flexibility of using our Powder Pack™, tablet and/or liquid reagents
- Unique colorimetric methods

ON SCREEN ASSISTANCE

- Easily display important test method information including sample cell size and reagents
- Scroll driven menu system allows user to easily find the test they are looking for. No more referencing cumbersome manuals or memorizing method numbers

Specifications

Display	Backlit graphic-display	Photometric Accuracy*	2% FS (T = 20°C – 25°C)	Weight (unit)	Approx. 1 lb. (450 g)
Interfaces	Infrared interface for test data transfer ¹ , RJ45 socket for Internet updates ²	Photometric Resolution	0.005 A	Ambient Conditions	5–40°C at max. 30–90% rel. humidity (non-condensing)
Optics	LEDs, interference filters (IF) and photo sensor in transparent sample chamber Wavelength range: 430 nm IF Δλ = 5 nm 530 nm IF Δλ = 5 nm 560 nm IF Δλ = 5 nm 580 nm IF Δλ = 5 nm 610 nm IF Δλ = 6 nm 660 nm IF Δλ = 5 nm IF = interference filter	Operation	Acid and solvent resistant, touch-sensitive keypad with audible feedback via integrated beeper	Language Selection	German, English, French, Spanish, Italian, Portuguese, Polish, Indonesian ; additional languages via Internet update
Wavelength Accuracy	± 1 nm	Power Supply	4 batteries (Mignon AA/LR6); Operation time: approx. 26 h continuous operation or 3500 tests	Memory Capacity	approx. 1000 data sets
		Auto-Off	approx. 20 minutes after last keypress with audible signal	Conformity	CE
		Dimensions	Instrument: 8.3" x 3.7" x 1.8" Case: 15.5" x 11.6" x 4.2"		

¹ optional available: IRM (See page 29)

² optional available: connection cable with integrated electronics (RS 232 / RJ-45 plug)

* tested with standard solutions

Ordering Information

Item	P/N	Item	P/N	Item	P/N
MD 600 Colorimeter	21 40 20	Vial stand for 6 round vials Ø 24 mm, acrylic glass	41 89 51	Tablet crusher, 10 cm length	36 41 09
Set of 12 round vials with lid Height 48 mm, Ø 24 mm	19 76 20	Vial stand for 10 vials (Ø 16 mm or □ 13,5 mm), acrylic glass	41 89 57	Cleaning brush, 10 cm	38 02 30
Set of 10 round vials with lid Height 90 mm, Ø 16 mm	19 76 65	Light Shielding Rings for vial Ø 24 mm (12 pc.)	19 76 26	Verification Standard Kit	21 56 40
Adapter for round vials ø 16 mm	19 80 21 90	Cleaning cloth for vials	19 76 35	Serial cable for software updates	21 40 30
Adapter for round vials ø 13 mm	19 80 21 92	Plastic funnel with handle	47 10 07	IRIM (Data Transfer Device)	21 40 50
Multi-Vials Type 3, with lids path length 10 mm, 10 ml volume Height 48 mm, Ø 24 mm (12 pc.)	19 76 05	Tablet crusher, 13 cm length	36 41 00		

Delivery Content

- Instrument in carrying case
- 4 x AA batteries
- 3 x 24 mm vials (glass, with lid)
- 3 x 16mm vials (glass, with lid)
- 1 tablet crusher & 1 brush
- 13 mm & 16 mm tube adapters
- Warranty Information
- Certificate of Conformity
- Instruction Manual



Parameter	Range	Method	Reagent	Qty	Reagent P/N
Absorbance			Direct Reading - no reagents required		
Acid Demand	0.1 - 4 mmol/l	Acid / Indicator	Alka-M Photometer Tablets	100 ct.	51 32 10 BT
Alkalinity-M	5 - 200 mg/l CaCO ₃	Acid / Indicator	Alka-M Photometer Tablets	100 ct.	51 32 10 BT
Alkalinity-M, HR	5 - 500 mg/l CaCO ₃	Acid / Indicator	Alka-M HR Photometer Tablets	100 ct.	51 32 40 BT
Alkalinity-P	5 - 300 mg/l CaCO ₃	Acid / Indicator	Alka-P Photometer Tablets	100 ct.	51 32 30 BT
Aluminum	0.01 - 0.25 Al	Eriochrome Cyanine R	VARIO Aluminum ECR Reagent, F20 VARIO Hexamethylenetetramine, F20 VARIO ECR Masking Reagent Solution	100 ct. 100 ct. 25 ml	53 16 20 53 16 50 53 16 25
			VARIO Aluminum Reagent Set	100 Tests	53 50 00
Aluminum	0.01 - 0.3 mg/l Al	Eriochrome Cyanine R	Aluminum No. 1 Tablet Aluminum No. 2 Tablet	100 ct. 100 ct.	51 54 60 BT 51 54 70 BT
			Combi-Pack: Aluminum No. 1 / Aluminum No. 2	100 Tests	51 76 01 BT
Ammonia	0.02 - 1 mg/l N	Indophenol Blue	Ammonia No.1 Tablet Ammonia No.2 Tablet	100 ct. 100 ct.	51 25 80 BT 51 25 90 BT
			Combi-Pack: Ammonia No. 1 / Ammonia No. 2	100 Tests	51 76 11 BT
Ammonia	0.01 - 0.8 mg/l N	Salicylate	VARIO Ammonia Salicylate Reagent, F10 VARIO Ammonia Cyanurate Reagent, F10	100 ct. 100 ct.	53 13 70 53 13 80
			VARIO Ammonia Nitrogen Reagent Set	100 Tests	53 55 00
Ammonia	0.02 - 2.5 mg/l N	Salicylate	VARIO Ammonia Salicylate Reagent, F5 VARIO Ammonia Cyanurate Reagent, F5 VARIO LR AM Dilution Tube VARIO Deionized Water (for zero)	50 ct. 50 ct. 50 ct. 100 ml	53 11 50 53 11 60 -- --
			VARIO LR Ammonia Reagent Set	25 Tests	53 56 00
Ammonia	1 - 50 mg/l N	Salicylate	VARIO Ammonia Salicylate Reagent, F5 VARIO Ammonia Cyanurate Reagent, F5 VARIO HR AM Dilution Tube VARIO Deionized Water (for zero)	50 ct. 50 ct. 50 ct. 100 ml	53 11 50 53 11 60 -- --
			VARIO HR Ammonia Reagent Set	25 Tests	56 56 50
Ammonia, Free (Part of Monochloramines)	0.01 - 0.5 mg/l N	Indophenol	VARIO Free Ammonia Reagent Solution VARIO Monochlor F Reagent	4 ml 100 ct.	53 18 00 53 18 10
			VARIO Free Ammonia Reagent Set	100 Tests	53 58 00
Boron	0.1 - 2 mg/l B	Azomethine	Boron No. 1 Tablet Boron No. 2 Tablet	100 ct. 100 ct.	51 57 90 51 58 00
			Combi-Pack: Boron No. 1 / No. 2	100 Tests	51 76 81
Bromine	0.05 - 13 mg/l Br	DPD	DPD No.1 Tablet	100 ct.	51 10 50 BT

Parameter	Range	Method	Reagent	Qty	Reagent P/N
Chloride	0.01 - 6 mg/l Cl	Silver Nitrate/Turbidity	Chloride T1 Tablets Chloride T2 Tablets	100 ct. 100 ct.	51 59 10 BT 51 59 20 BT
			Combi-Pack: Chloride T1 / T2	100 Tests	51 77 41 BT
Chloride	0.5 - 20 mg/l Cl ⁻	Mercury Thiocyanate / Iron Nitrate	Chloride Reagent A (KS251) Chloride Reagent B (KS253)	65 ml 65 ml	56L025165 56L025365
			Chloride Reagent Set	50 Tests	56R018490
Chlorine free, combined, total	0.01 - 6 mg/l Cl ₂	DPD	DPD No. 1 Tablet DPD No. 3 Tablet	100 ct. 100 ct.	51 10 50 BT 51 10 80 BT
			Combi-Pack: DPD No. 1 / DPD No. 3	100 Tests	51 77 11 BT
Chlorine free, combined, total	0.1 - 10 mg/l Cl ₂	DPD	DPD No. 1 HR Tablets DPD No. 3 HR Tablets	100 ct. 100 ct.	51 15 00 BT 51 15 90 BT
			Combi-Pack: DPD No. 1 HR / DPD No. 3 HR	100 Tests	51 77 91 BT
Chlorine free, combined, total	0 - 4 mg/l Cl ₂	DPD	DPD 1 Buffer Solution DPD 1 Reagent Solution DPD 3 Solution	3 x 15 ml 1 x 15 ml 2 x 15 ml	47 10 10 47 10 20 47 10 30
			Chlorine Reagent Set	150 Tests	47 10 56
Chlorine free, combined, total	0.02 - 2 mg/l Cl ₂	DPD	VARIO DPD Free Chlorine Reagent, F10 VARIO DPD Total Chlorine Reagent, F10	100 ct. 100 ct.	53 01 00 53 01 20
Chlorine free, combined, total	0.1 - 8 mg/l Cl ₂	DPD	VARIO DPD Free Chlorine Reagent, F10 VARIO DPD Total Chlorine Reagent, F10	100 ct. 100 ct.	51 01 00 53 01 20
Chlorine, UHR (KI)	5 - 200 mg/l Cl ₂	KI / Acid	Chlorine HR (KI) Tablet Acidifying GP Tablet	100 ct. 100 ct.	51 30 00 BT 51 54 80 BT
			Combi-Pack: Chlorine HR (KI) / Acidifying GP	100 tests	51 77 21 BT
Chlorine Dioxide	0.02 - 11 mg/l ClO ₂	DPD / Glycine	DPD No. 1 Tablet	100 ct.	51 10 50 BT
		<i>Required if testing in the presence of chlorine:</i>	Combi-Pack: DPD No. 1 / DPD No. 3 Glycine Tablet	100 Tests 100 ct.	51 77 11 BT 51 21 70 BT
Chromium	0.02 - 2 mg/l Cr	1, 5-Diphenylcarbozide	Persulfate Reagent for Cr Chromium Hexavalent Reagent	100 ct. 100 ct.	53 73 00 53 73 10
			Chromium Reagent Set	100 Tests	53 78 00
COD	0 - 150 mg/l O ₂ 0 - 1500 mg/l O ₂ 0 - 15000 mg/l O ₂	Dichromate / H ₂ SO ₄	VARIO LR COD Tube Tests (25 pack) VARIO MR COD Tube Tests (25 pack) VARIO HR COD Tube Tests (25 pack)	25 ct. 25 ct. 25 ct.	2 42 07 20 2 42 07 21 2 42 07 22
Copper HR free and total	0.05 - 5 mg/l Cu	Biquinoline	Copper No. 1 Tablet Copper No. 2 Tablet	100 ct. 100 ct.	51 35 50 BT 51 35 60 BT
			Combi-Pack: Copper No. 1 / No. 2	100 Tests	51 76 91 BT
Copper HR, free only	0.05 - 5 mg/l Cu	Bicinchoninate	VARIO Copper Reagent, F10	100 ct.	53 03 00

Parameter	Range	Method	Reagent	Qty	Reagent P/N
Copper free and total	0.05 - 4 mg/l Cu	Bicinchoninate	Coppercol Reagent 1 Solution (KS240)	30 ml	56L024030
			Coppercol Reagent 2 Solution(KS241)	30 ml	56L024130
			Coppercol Reagent 3 Powder (KS242)	10 g	56L024210
			Copper No. 2 Tablet	100 ct.	51 35 60 BT
			Copper Reagent Set	50 Tests	56R023355
Cyanide	0.01 - 0.5 mg/l CN	Pyridine-barbituric acid	Cyanide-11 Reagent	18 g	--
			Cyanide-12 Reagent	12.5 g	--
			Cyanide-13 Reagent Solution	53 ml	--
			Cyanide Reagent Set	~200 Tests	2 41 88 75
Cyanuric Acid	0 - 160 mg/l Cys	Melamine	CyA Test Tablet	100 ct.	51 13 70 BT
DEHA	20 - 500 µg/l DEHA	PPST	DEHA Solution	100 ml	46 11 81
			DEHA Tablet	100 ct.	51 32 20 BT
			Combi-Pack: DEHA Solution & DEHA Tablets	100 Tests	51 78 10 BT
DEHA	20 - 500 µg/l DEHA	PPST	VARIO DEHA-2 Reagent Solution	100 ml	53 14 10
			VARIO Oxyscav-1 Reagent	100 ct.	53 14 00
			VARIO DEHA Reagent Set	100 Tests	53 60 00
Fluoride	0.05 - 2 mg/l F	SPADNS	SPADNS Reagent	250 ml	46 74 81
				500 ml	46 74 82
				30 ml	20 56 30
			Fluoride Standard		
Hardness, Calcium	50 - 900 mg/l CaCO ₃	Murexide	Calcheck Tablet	100 ct.	51 56 50
Hardness, Calcium	0 - 500 mg/l CaCO ₃	Murexide	Combi-Pack: Calcio-H No. 1 / No. 2	100 Tests	51 77 61 BT
			Combi-Pack: Calcio-H No. 1 / No. 2	250 Tests	51 77 62 BT
Hardness, Total	2 - 50 mg/l CaCO ₃ 20 - 500 mg/l CaCO ₃	Metallpthalein	Hardcheck P Tablet	100 ct.	51 56 60 BT
Hazen (Color of Water)	0 - 500 Pt.Co. Units	Platinum Cobalt	Direct Reading - no reagents required		
Hydrazine	0.05 - 0.5 mg/l N ₂ H ₄	Dimethylamino-benzaldehyde	Hydrazine Test Powder	30 g	46 29 10
			Spoon	1 ea.	38 49 30
			Hydrazine Reagent Set	100 Tests	51 78 30
Hydrazine	0.01 - 0.6 mg/l N ₂ H ₄	Dimethylamino-benzaldehyde	VARIO Hydra 2 Reagent Solution	100 ml	53 12 00
Hydrazine	0.01 - 0.7 mg/l N ₂ H ₄	PDMAB	Hydrazine Reagent Ampoules	30 ct.	38 04 70
Hydrogen Peroxide	0.03 - 3 mg/l H ₂ O ₂	DPD / Catalyst	Hydrogen Peroxide LR Tablet	100 ct.	51 23 80 BT
Iodine	0.05 - 3.6 mg/l I	DPD	DPD No. 1 Tablet	100 ct.	51 10 50 BT

Parameter	Range	Method	Reagent	Qty	Reagent P/N
Iron (II, III)	0.02 - 1 mg/l Fe	PPST	Iron LR Tablet (Fe ²⁺ and Fe ³⁺)	100 ct.	51 53 70 BT
			Iron (II) LR Tablet (Fe ²⁺)	100 ct.	51 54 20 BT
Iron (II, III)	0.02 - 1 mg/l Fe	1, 10-Phenanthroline	VARIO Iron Ferro Reagent, F10	100 ct.	53 05 60
Iron, Total	0.02 - 1.8 mg/l Fe	TPTZ	VARIO Iron TPTZ Reagent, F10	100 ct.	53 05 50
Iron	0.03 - 2.0 mg/l Fe	Ferrozine / Thioglycolate	Ferrozine/Thioglycolate Reagent (KS61)	65 ml	56L006165
			Thioglycolate Reagent (KS63)	65 ml	56L006365
			Ammonia Persulfate Tablet (KT274)	50 ct.	56T027450
			Phenolphthalein Indicator (KT135)	65 ml	56L013565
			Calcium Hardness Buffer (KS144)	65 ml	56L014465
			Iron Reagent Set	50 Tests	56R018890
Iron	0.03 - 2.0 mg/l Fe	Ferrozine / Thioglycolate	Acetate Buffer (KS60 FE1)	65 ml	56L006065
			Thioglycolate Reagent (KS63)	65 ml	56L006365
			Ferrozine Reagent (KS65 FE7)	65 ml	56L006565
			Iron Reagent Set	50 Tests	56R023490
Iron	0.1 - 10 mg/l Fe	Thioglycolate	Total Hardness Buffer (KS160 TH2 FE8)	65 ml	56L016065
			Thioglycolate Reagent (KS63)	65 ml	56L006365
			Iron Reagent Set	50 Tests	56R023590
Manganese	0.2 - 4 ml/l Mn	Formaloxime	Manganese LR No. 1 Tablet	100 ct.	51 60 80 BT
			Manganese LR No. 2 Tablet	100 ct.	51 60 90 BT
			Combi-Pack: Manganese LR No. 1 / LR No. 2	100 Tests	51 76 21 BT
Manganese	0.01 - 0.7 mg/l Mn	PAN	VARIO Ascorbic Acid Reagent	100 ct.	53 11 00
			VARIO Alkaline Cyanide Reagent	60 ml	53 06 20
			VARIO PAN Indicator Solution	60 ml	53 06 30
			VARIO LR Manganese Reagent Set, F10	50 Tests	53 50 90
			VARIO Rochelle Salt Solution	30 ml	53 06 40
				500 ml	53 06 42
Manganese	0.1 - 18 mg/l Mn	Periodate Oxidation	VARIO Manganese Citrate Buffer, F10	100 ct.	53 06 50
			VARIO Sodium Periodate Reagent, F10	100 ct.	53 06 60
			VARIO HR Manganese Reagent Set	100 Tests	53 51 00
Manganese	0.05 - 5 mg/l Mn	Formaloxime	Manganese Reagent A (KS265)	30 ml	56L026530
			Manganese Reagent B (KS266)	30 ml	56L026630
			Manganese Reagent C (KS267)	30 ml	56L030430
			Manganese Reagent Set	50 Tests	56R024055
Molybdate / Molybdenum 1 - 50 mg/l MoO₄		Thioglycolate	Molybdate No. 1 HR Tablet	100 ct.	51 30 60 BT
			Molybdate No. 2 HR Tablet	100 ct.	51 30 70 BT
			Combi-Pack Molybdate No. 1 HR / No. 2 HR	100 Tests	51 76 31 BT

Only required if samples have Hardness values above 300 mg/l CaCO₃

Parameter	Range	Method	Reagent	Qty	Reagent P/N
Molybdate / Molybdenum	0.5 - 5 mg/l MoO ₄ 0.03 - 3 mg/l Mo	Mercaptoacetic Acid	VARIO Molybdenum 1 LR Reagent, F20	100 ct.	53 08 10
			VARIO Molybdenum 2 LR Reagent	50 ml	53 08 20
			VARIO LR Molybdate Reagent Set, F20	100 Tests	53 54 50
Required Accessory: Mixing Cylinder, 25 ml (Glass)				1 Ea.	19 80 26 50
Molybdate / Molybdenum	0.5 - 66 mg/l MoO ₄	Mercaptoacetic Acid	VARIO Molybdenum HR 1 Reagent, F10	100 ct.	53 07 50
			VARIO Molybdenum HR 2 Reagent, F10	100 ct.	53 07 60
			VARIO Molybdenum HR 3 Reagent, F10	100 ct.	53 07 70
			VARIO HR Molybdenum Reagent Set, F10	100 Tests	53 53 00
Molybdate / Molybdenum	1 - 100 mg/l MoO ₄	Thioglycolate	Thioglycolate Reagent (K563)	65 ml	56L006365
Monochloramines	0.04 - 4.5 mg/l Cl ₂	Indophenol	VARIO Monochlor F Reagent	100 ct.	53 18 10
Nickel	0.1 - 10 mg/l Ni	Nioxime	Nickel No. 1 Tablet	100 ct.	51 56 30 BT
			Nickel No. 2 Tablet	100 ct.	51 56 40 BT
			Combi-Pack: Nickel No. 1 / No. 2	100 Tests	51 78 50 BT
Nitrate	0.08 - 1 mg/l N	Zinc Reduction / NED	Nitrate Test Powder	15 g	46 52 30
			Nitrate Test Tablet	100 ct.	50 28 10
			Nitrite LR Tablet	100 ct.	51 23 10
			Nitrate Test Tube	1 Ea.	36 62 20
			VARIO Nitra X Reagent Tube, Reagent A	50 ct.	--
VARIO Nitra X Chromotropic, Reagent B	50 ct.	53 05 90			
Deionized Water (for Zero)	100 ml	--			
VARIO Nitrate Tube Test Reagent Set	25 Tests	53 55 80			
Nitrite	0.01 - 0.5 mg/l N	N-(1-Naphthyl)-ethylenediamine	Nitrite LR Tablet	100 ct.	51 23 10 BT
			VARIO Nitrite 3 Reagent, F10	100 ct.	53 09 80
Nitrogen, Total	0.5 - 25 mg/l N	Persulfate-Digestion	VARIO Total N Persulfate Reagent	50 ct.	--
			VARIO Total Nitrogen Reagent A	50 ct.	--
			VARIO Total Nitrogen Reagent B	50 ct.	53 03 90
			VARIO Total Nitrogen Hydroxide LR Tubes	50 ct.	--
			VARIO Total Nitrogen Acid LR / HR Tubes	50 ct.	--
			Deionized Water (for Zero)	100 ml	--
			VARIO LR Total Nitrogen Reagent Set	25 Tests	53 55 50
Required Accessory: RD 125 Reactor	1 Ea.	2 41 89 40			
Nitrogen, Total	5 - 150 mg/l N	Persulfate-Digestion	VARIO Total N Persulfate Reagent	50 ct.	--
			VARIO Total Nitrogen Reagent A	50 ct.	--
			VARIO Total Nitrogen Reagent B	50 ct.	53 03 90
			VARIO Total Nitrogen Hydroxide HR Tubes	50 ct.	--
			VARIO Total Nitrogen Acid LR / HR Tubes	50 ct.	--
			Deionized Water (for Zero)	50 ct.	--
			VARIO HR Total Nitrogen Reagent Set	25 Tests	53 55 60
Required Accessory: RD 125 Reactor	1 Ea.	2 41 89 40			

Parameter	Range	Method	Reagent	Qty	Reagent P/N
Oxygen, Active	0.1 - 10 mg/l O ₂	DPD	DPD No. 4 Tablet	100 ct.	51 12 20 BT
Oxygen, Dissolved	10 - 800 µg/l O ₂	Rhodazine D™	Dissolved Oxygen Ampoule (Vacu-Vial®)	30 ct.	38 04 50
			Adapter for Vacu-Vial®	1 Ea.	19 20 75
Ozone	0.02 - 2 mg/l O ₃	DPD / Glycine	Combi-Pack: DPD No. 1 / DPD No. 3	100 Tests	51 77 11 BT
			<i>Required if testing in the presence of chlorine:</i> Glycine Tablet	100 ct.	51 21 70 BT
PHMB (Biguanide)	2 - 160 mg/l PHMB	Buffer / Indicator	PHMB Photometer Tablet	100 ct.	51 61 00 BT
Phosphate, Ortho	0.05 - 4 mg/l PO ₄	Phosphomolybdic Acid / Ascorbic Acid	Phosphate No. 1 LR Tablet	100 ct.	51 30 40
			Phosphate No. 2 LR Tablet	100 ct.	51 30 50 BT
			Combi-Pack: Phosphate No. 1 LR / No. 2 LR	100 Tests	51 76 51 BT
Phosphate, Ortho	1 - 80 m/l PO ₄	Vanadomolybdate	Phosphate No. 1 HR Tablet	100 ct.	51 58 10
			Phosphate No. 2 HR Tablet	100 ct.	51 58 20
			Combi-Pack: Phosphate No. 1 HR / No. 2 HR	100 Tests	51 76 61
Phosphate, Ortho	0.06 - 2.5 mg/l PO ₄	Phosphomolybdenum Blue / Ascorbic Acid	VARIO Phosphate 3 Reagent, F10	50 ct.	53 15 51
				100 ct.	53 15 50
				1000 ct.	53 15 53
			VARIO Dilution Vial	50 ct.	--
VARIO Phosphate 3 Reagent, F10	50 ct.	53 15 51			
Deionized Water (for Zero)	100 ml	--			
VARIO Ortho Phosphate Reagent Set	50 Tests	53 52 00			
Phosphate, Total	0.02 - 1.1 mg/l P 0.06 - 3.5 mg/l PO ₄	Persulfate Digestion: Phosphomolybdenum Blue / Ascorbic Acid	VARIO Acid Reagent Vial	50 ct.	--
			VARIO Phosphate 3 Reagent, F10	50 ct.	53 15 51
			Deionized Water (for Zero)	100 ml	--
			VARIO Sodium Hydroxide, 1 N	100 ml	53 15 20
			VARIO Sodium Hydroxide, 1.54 N	100 ml	53 15 30
			VARIO Potassium Persulfate Reagent, F10	50 ct.	53 15 60
			VARIO Phosphorous, Total & Acid Hydrolyzable Reagent Set	50 Tests	53 52 50
Required Accessory: RD 125 Reactor	1 Ea.	2 41 89 40			
Phosphate, Total	0.02 - 1.1 mg/l P 0.06 - 3.5 mg/l PO ₄	Acid / Persulfate Digestion / Ascorbic Acid	VARIO Acid Reagent Vial	50 ct.	--
			VARIO Phosphate 3 Reagent, F10	50 ct.	53 15 51
			Deionized Water (for Zero)	100 ml	--
			VARIO Sodium Hydroxide, 1.54 N	100 ml	53 15 30
			VARIO Potassium Persulfate Reagent, F10	50 ct.	53 15 60
			VARIO Phosphate, Total Reagent Set	50 Tests	53 52 10
			Required Accessory: RD 125 Reactor	1 Ea.	2 41 89 40
Phosphate, Ortho	5 - 40 mg/l PO ₄	Vanadomolybdate	Phosphate 1 Reagent Ampoule	30 ct.	38 04 60
Phosphate, Ortho	0.05 - 5 mg/l PO ₄	Stannous Chloride	Phosphate 2 Reagent Ampoule	30 ct.	38 04 80

Parameter	Range	Method	Reagent	Qty	Reagent P/N
Phosphate	0.1 - 10 mg/l PO ₄	Phosphomolybdic Acid / Ascorbic Acid	CRP Reagent (KS80)	2 x 65 ml	56L008065
			Ascorbic Acid (KP19)	20 g	56P011920
			Phosphate Reagent Set	50 Tests	56R023765
Phosphate	5 - 80 mg/l PO ₄	Vanadomolybdate	Ammonia Molybdate (KS228)	65 ml	56L022865
			Ammonia Metavanadate (KS229)	65 ml	56L022965
			Sulfuric Acid, 50% (KS278)	65 ml	56L027865
			Phenolphthalein Indicator (KS135)	65 ml	56L013565
			Calcium Hardness Buffer (KS144)	65 ml	56L014465
			Ammonia Persulfate Tablet	50 ct.	56T027450
			Phosphate Reagent Set	50 Tests	56R019090
Phosphonate	0.02 - 125 mg/l PO ₄	Persulfate UV Oxidation	VARIO Potassium Persulfate, F10	100 ct.	53 15 60
			VARIO Phosphate 3 Reagent, F10	2 x 100 ct.	53 15 50
			VARIO Phosphonate Reagent Set	100 Tests	53 52 20
			Required Accessories: UV Lamp & Power Supply (110 v)* Mixing Cell with lid	1 Ea. 1 Ea.	40 07 45 40 07 60
pH	5.2 - 6.8 pH	Bromcresol Purple	Bromcresol Purple Photometer Tablet	100 ct.	51 57 00 BT
pH	5.5 - 8.4 pH	Phenol Red	Phenol Red Photometer Tablet	100 ct.	51 17 70 BT
pH	6.5 - 8.4 pH	Phenol Red	Phenol Red Solution	15 ml	47 10 40
pH	8.0 - 9.6 pH	Thymol Blue	Thymol Blue Photometer	100 ct.	51 57 10
Polyacrylates	1 - 30 mg/l	Turbidity	Polyacrylate Reagent 1 (KS255)	65 ml	56L025565
			Polyacrylate Reagent 2 (KS256)	65 ml	56L026565
			Propan-2-ol (KS336)	65 ml	56L033665
			Cartridge	1 Ea.	AS-K22811-KW
			2, 4 Dinitrophenol (KS173)	65 ml	56L017365
			Nitric Acid (KT183)	65 ml	56L018365
Polyacrylate Reagent Set	50 Tests	56R019165			
Potassium	0.7 - 12 mg/l K	Tetraphenylborate - Turbidity	Potassium T Tablet	100 ct.	51 56 70
Silica	0.05 - 4 mg/l SiO ₂	Silicomolybdate	Silica No. 1 Tablet	100 ct.	51 31 30
			Silica No. 2 Tablet	100 ct.	51 31 40
			Combi-Pack: Silica No. 1 / No. 2	100 Tests	51 76 71
			Silica PR Tablet (in presence of phosphate)	100 ct.	51 31 50
Silica	0.1 - 1.6 mg/l SiO ₂	Heteropolyblue	VARIO Amino Acid F Reagent, F10	100 ct.	53 16 00
			VARIO Citric Acid Reagent, F10	2 x 100 ct.	53 17 10
			VARIO Molybdate 3 Reagent Solution	2 x 50 ml	53 17 30
			VARIO Silica LR Reagent Set, 10 ml Sample	100 Tests	53 56 90
Silica	1 - 90 mg/l SiO ₂	Silicomolybdate	VARIO Silica HR Molybdate, F10	100 ct.	53 17 00
			VARIO Silica HR Acid Reagent, F10	100 ct.	53 17 10
			VARIO Silica HR Citric Acid, F10	100 ct.	53 17 20
			VARIO Silica HR Reagent Set, 10 ml Sample	100 Tests	53 57 00

Parameter	Range	Method	Reagent	Qty	Reagent P/N
Silica	0.1 - 8 mg/l SiO ₂	Heteropolyblue	Silica Reagent 1 (KS104)	65 ml	56L010465
			Silica Reagent 2 (KS105)	65 ml	56L010565
			Silica Reagent 3 (KS106)	10 g	56P010610
Silica Reagent Set	50 Tests	56R023856			
Sodium Hypochlorite	0.2 - 16% NaOCl	Potassium Iodide	Acidifying GP Tablet	100 ct.	51 54 80 BT
			Chlorine HR (KI) Tablet	100 ct.	51 30 00 BT
			Combi-Pack: Chlorine HR (KI) / Acidifying GP	100 Tests	51 77 21 BT
Required Accessory: Dilution Set (for sample preparation)	1 Ea.	41 44 70			
Sulfate	5 - 100 mg/l SO ₄	Bariumsulfate Turbidity	VARIO Sulfa 4 Reagent, F10	100 ct.	53 21 60
Sulfate	5 - 100 mg/l SO ₄	Bariumsulfate Turbidity	Sulfate T Tablet	100 ct.	51 54 50 BT
Sulfide	0.04 - 0.5 mg/l S	DPD / Catalyst	Sulfide No. 1 Tablet	100 ct.	50 29 30
			Sulfide No. 2 Tablet	100 ct.	50 29 40
			Combi-Pack: Sulfide No. 1 / No. 2	100 Tests	51 78 40
Sulfite	0.1 - 5 mg/l SO ₃	DTNB	Sulfite LR Tablet	100 ct.	51 80 20 BT
Suspended Solids	5 - 750 mg/l	Turbidity / Attenuated Radiation Method	No Reagents Required		
Triazoles	1 - 16 mg/l	Catalyzed UV Digestion	VARIO Triazole Reagent, F25	100 ct.	53 22 00
Turbidity	0 - 1000	Attenuated Radiation Method	No Reagents Required		
Urea	0.1 - 2.5 mg/l CH ₄ N ₂ O Urease / Indophenol		Urea Reagent 1	15 ml	45 93 00
			Urea Reagent 2	10 ml	45 94 00
			Ammonia No. 1 Tablet	100 ct.	51 25 80 BT
			Ammonia No. 2 Tablet	100 ct.	51 25 90 BT
			Urea Reagent Set	100 Tests	51 78 00 BT
Zinc	0.02 - 1 mg/l Zn	Zincon / EDTA	Copper / Zinc LR Tablet	100 ct.	51 26 20 BT
			EDTA Tablet	100 ct.	51 23 90 BT
			Dechlor Tablet	100 ct.	51 23 50 BT
Combi-Pack: Copper / Zinc LR, EDTA & Dechlor	100 Tests	51 23 50 BT			
Zinc	0.1 - 2.5 mg/l	Zincon / EDTA	Zinc Reagent 1 (KS243)	65 ml	56L024365
			Zinc Reagent 2 (KS244)	20 g	56L024420
Zinc Reagent Set	50 Tests	56R023965			