

Reagents

Wave lengths λ / nm

Test	Range	Wave lengths λ / nm							Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL800	XD 7000	XD 7500		
ADMI	2 - 100 mg/l 10 - 500 mg/l	-	-	-	-	-	400 to 700	400 to 700	Tristimulus Colorimetry	50 mm □ 10 mm □
Alkalinity-M	5 - 200 mg/l	610	610	610	610	615	615	615	Acid/Indicator ^{1,2,5}	24 mm ø
Alkalinity-M HR	5 - 500 mg/l	-	-	610	610	615	615	615	Acid/Indicator ^{1,2,5}	24 mm ø
Alkalinity-P	5 - 300 mg/l	-	-	560	560	551	551	551	Acid/Indicator ^{1,2,5}	24 mm ø
Aluminium VARIO	0.01 - 0.25 mg/l	530	-	530	530	535	535	535	Eriochrome cyanine R ²	24 mm ø
Aluminium	0.01 - 0.3 mg/l	530	-	530	530	535	535	535	Eriochrome cyanine R ²	24 mm ø
Ammonia	0.02 - 1 mg/l	610	-	610	610	676	676	676	Indophenole blue ^{2,3}	24 mm ø
Ammonia VARIO	0.01 - 0.8 mg/l	660	-	660	660	655	655	655	Salicylate ²	24 mm ø
Ammonia VARIO LR	0.02 - 2.5 mg/l	-	-	660	660	655	655	655	Salicylate ²	16 mm ø
Ammonia VARIO HR	1 - 50 mg/l	-	-	660	660	655	655	655	Salicylate ²	16 mm ø
Arsenic (III, V)	0.02 - 0.6 mg/l	-	-	-	-	507	507	507	Silver diethyldithiocarbamate ¹	20 mm ø
Biguanide (see PHMB)										

40

Material safety data sheets: www.aqualytic.de

For other reagent quantities please see our current price list.

Legend

¹ Deutsche Einheitsverfahren zur Wasser-, Abwasser- und Schlamm- Untersuchung² Standard Methods for the Examination of Water and Wastewater, 18th Edition; 1992³ Photometrische Analysenverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart; 1989⁴ Photometrische Analyse, Lange/Vejdelek, Verlag Chemie; 1980⁵ Colorimetric Chemical Analytical Methods, 9th Edition, Lovibond®

Display	Reagent	Form of reagent/Quantity	Order code
Pt-Co-Units	no reagents required	-	-
CaCO ₃	ALKA-M-PHOTOMETER	Tablet / 100	451 32 10 BT
CaCO ₃	ALKA-M-HR-PHOTOMETER	Tablet / 100	451 32 40 BT
CaCO ₃	ALKA-P-PHOTOMETER	Tablet / 100	451 32 30 BT
Al	VARIO Aluminum ECR/F20 VARIO Aluminum Hexamine/F20 VARIO Aluminum ECR Masking Reagent	Powder Pack / 100 Powder Pack / 100 Liquid reagent / 25 ml Set	453 50 00
Al	ALUMINIUM No. 1 ALUMINIUM No. 2 Combi pack# ALUMINIUM No.1 / No.2 Combi pack# ALUMINIUM No.1 / No.2	Tablet / 100 Tablet / 100 each 100 each 250	451 54 60 BT 451 54 70 BT 451 76 01 BT 451 76 02 BT
NH ₄ - N	AMMONIA No. 1 AMMONIA No. 2 Combi pack# AMMONIA No.1 / No.2 Combi pack# AMMONIA No.1 / No.2 Ammonia conditioning powder (for seawater)	Tablet / 100 Tablet / 100 each 100 each 250 Powder / 15 g / 50 Tests	451 25 80 BT 451 25 90 BT 451 76 11 BT 451 76 12 BT 46 01 70
NH ₄ - N	VARIO Ammonia Salicylate F10 VARIO Ammonia Cyanurate F10	Powder Pack / 100 Powder Pack / 100 Set	453 55 00
NH ₄ - N	VARIO Ammonia Salicylate F5 VARIO Ammonia Cyanurate F5 VARIO Am Diluent Reagent LR VARIO Deionised Water (for Zero)	Powder Pack / 50 Powder Pack / 50 Reaction tube / 50 Bottle, 100 ml Set (Tube test)	453 56 00
NH ₄ - N	VARIO Ammonia Salicylate F5 VARIO Ammonia Cyanurate F5 VARIO Am Diluent Reagent HR VARIO Deionised Water (for Zero)	Powder Pack / 50 Powder Pack / 50 Reaction tube / 50 Bottle, 100 ml Set (Tube test)	453 56 50
As	for chemicals see manual, reagents at specialized chemistry dealer		

^{a)} determination of free, combined and total

^{b)} Reactor is necessary for COD (150°C), TOC (120°C) and total -chromium, - phosphate, -nitrogen, (100°C)

^{c)} AL450: Adapter is necessary for Vacu-cuvettes® (Order code 19 20 75)

^{d)} Spectroquant® is a Merck KGaA Trademark

^{e)} alternative reagent, used instead of DPD No.1 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity

^{f)} additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine

^{g)} Reagent recovers most insoluble iron oxides without digestion

^{h)} additionally required for samples with hardness values above 300 mg/l CaCO₃

ⁱ⁾ high range by dilution

^{j)} Vacu-cuvettes® is a Chemetrics Trademark

including stirring rod

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		AL100 & AL110	AL200	AL400, AL410	AL450	AL800	XD 7000	XD 7500		
Boron	0.1 - 2 mg/l	-	-	430	430	450	450	450	Azomethine ³	24 mm ø
Bromine	0.05 - 13 mg/l 0.05 - 1 mg/l 0.1 - 3 mg/l 0.05 - 6,5 mg/l	530 - - -	530 - - -	530 - - -	530 - - -	- 510 510 510	510 510 510 -	510 510 510 -	DPD ⁵	24 mm ø 50 mm o 10 mm o 24 mm ø
Bromine Powder	0.05 - 4.5 mg/l	-	-	530	530	-	510	510	DPD ^{1,2}	24 mm ø
Cadmium (Cd²⁺)	0.025 - 0.75 mg/l	-	-	-	-	525	525	525	Cadion	16 mm ø
Chloride	0.5 - 25 mg/l 5 - 250 mg/l ¹⁾	530 530	- -	530 -	530 -	450 -	450 -	450 -	Silver nitrate/turbidity	24 mm ø
Chloride	5 - 60 mg/l	-	-	-	-	455	455	455	Iron (III)-thiocyanate ⁴	24 mm ø
Chloride	0.5 - 20 mg/l	430	-	430	-	-	430	430	Mercury thiocyanate / Iron nitrate	24 mm ø
Chlorine ^{o)}	0.01 - 6 mg/l 0.02 - 0.5 mg/l 0.1 - 6 mg/l 0.02 - 3 mg/l	530 - - -	530 - - -	530 - - -	530 - - -	- 510 510 510	510 510 510 -	510 510 510 -	DPD ^{1,2}	24 mm ø 50 mm o 10 mm o 24 mm ø
Chlorine HR (DPD) ^{o)}	0.1 - 10 mg/l 0.1 - 10 mg/l	530 -	530 -	530 -	530 -	- 510	- 510	- 510	DPD ^{1,2}	24 mm ø 10 mm □
Chlorine ^{o)}	0.02 - 4 mg/l 0.02 - 3 mg/l	530 -	530 -	530 -	530 -	- 510	510 -	510 -	DPD ^{1,2}	24 mm ø 24 mm ø

Material safety data sheets: www.aqualytic.de

For other reagent quantities please see our current price list.

Legend

¹ Deutsche Einheitsverfahren zur Wasser-, Abwasser- und Schlamm- Untersuchung² Standard Methods for the Examination of Water and Wastewater, 18th Edition; 1992³ Photometrische Analysenverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart; 1989⁴ Photometrische Analyse, Lange/Vejdelek, Verlag Chemie; 1980⁵ Colorimetric Chemical Analytical Methods, 9th Edition, Lovibond®

Display	Reagent	Form of reagent/Quantity	Order code
B	BORON No. 1 BORON No. 2 Combi pack# BORON No.1 / No.2 Combi pack# BORON No.1 / No.2	Tablet / 100 Tablet / 100 each 100 each 200	451 57 90BT 451 58 00BT 451 76 81BT 451 76 82BT
Br	DPD No. 1 DPD No. 3 Combi Pack# DPD No.1 / No.3 Combi Pack# DPD No.1 / No.3 DPD No. 1 HIGH CALCIUM ^{e)} DPD No. 3 HIGH CALCIUM ^{e)} Combi Pack# DPD No.1 / No.3 HIGH CALCIUM ^{e)} Combi Pack# DPD No.1 / No.3 HIGH CALCIUM ^{e)} DPD Nitrite GLYCINE ^{f)} Combi pack# DPD No.1 / GLYCINE Combi pack# DPD No.1 / GLYCINE	Tablet / 100 Tablet / 100 each 100 each 250 Tablet / 100 Tablet / 100 each 100 each 250 Tablet / 250 Tablet / 100 each 100 each 250	451 10 50 BT 451 10 80 BT 451 77 11 BT 451 77 12 BT 451 57 40 BT 451 57 30 BT 451 77 81 BT 451 77 82 BT 450 26 91 451 21 70 BT 451 77 31 BT 451 77 32 BT
Br	Chlorine TOTAL-DPD/F10	Powder Pack / 100	453 01 20
Cd	Spectroquant® 1.14834.0001 ^{d)}	Tube test / 25	42 07 50
Cl	CHLORIDE T1 CHLORIDE T2 Combi pack# CHLORIDE T1 / T2 Combi pack# CHLORIDE T1 / T2	Tablet / 100 Tablet / 100 each 100 each 250	451 59 10 BT 451 59 20 BT 451 77 41 BT 451 77 42 BT
Cl	Chlorid-51 / Chlorid-52	Reagent test (Liquid reagent) approx. 50-75 Tests	2 41 90 31
Cl ⁻	KS251 (Chloride Reagent A) KS253 (Chloride Reagent B)	Liquid reagent / 65 ml Liquid reagent / 65 ml Set	56L025165 56L025365 56R018490
Cl ₂	DPD No. 1 DPD No. 3 Combi pack# DPD No.1 / No.3 Combi pack# DPD No.1 / No.3 DPD No. 1 HIGH CALCIUM ^{e)} DPD No. 3 HIGH CALCIUM ^{e)} Combi Pack# DPD No.1 / No.3 HIGH CALCIUM ^{e)} Combi Pack# DPD No.1 / No.3 HIGH CALCIUM ^{e)}	Tablet / 100 Tablet / 100 each 100 each 250 Tablet / 100 Tablet / 100 each 100 each 250	451 10 50 BT 451 10 80 BT 451 77 11 BT 451 77 12 BT 451 57 40 BT 451 57 30 BT 451 77 81 BT 451 77 82 BT
Cl ₂	DPD No. 1 HR DPD No. 3 HR	Tablet / 100 Tablet / 100	451 15 00 BT 451 15 90 BT
Cl ₂	DPD 1 Buffer solution DPD 1 Reagent solution DPD 3 Solution	Liquid reagent / 15 ml Liquid reagent / 15 ml Liquid reagent / 15 ml Set	47 10 10 47 10 20 47 10 30 47 10 56

^{a)} determination of free, combined and total

^{b)} Reactor is necessary for COD (150°C), TOC (120°C) and total -chromium, - phosphate, -nitrogen, (100°C)

^{c)} AL450: Adapter is necessary for Vacu-cuvettes® (Order code 19 20 75)

^{d)} Spectroquant® is a Merck KGaA Trademark

^{e)} alternative reagent, used instead of DPD No.1 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity

^{f)} additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine

^{g)} Reagent recovers most insoluble iron oxides without digestion

^{h)} additionally required for samples with hardness values above 300 mg/l CaCO₃


ⁱ⁾ high range by dilution

^{j)} Vacu-cuvettes® is a Chemetrics Trademark

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Reagents

Wave lengths λ / nm

Test	Range	Wave lengths λ / nm								Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL800	XD 7000	XD 7500			
Chlorine Powder MR	0,02 - 3,5 mg/l	530	-	530	530	510	510	510	DPD ^{1,2}	24 mm ø	
Chlorine Powder ^{a)}	0.02 - 2 mg/l 0.1 - 8 mg/l	530 530	- -	530 530	530 -	510 -	510 -	510 -	DPD ^{1,2}	24 mm ø 24 mm ø multy cuvette	
Chlorine HR (KI)	5 - 200 mg/l	530	-	530	530	470	470	470	KI / Acid ⁵	16 mm ø	
Chlorine dioxide	0.02 - 11 mg/l 0.05 - 1 mg/l 0.05 - 2.5 mg/l	530 - -	530 - -	530 - -	530 - -	- 510 510	510 510 -	510 510 -	DPD/Glycine ^{1,2}	24 mm ø 50 mm ø 24 mm ø	
Chlorine dioxide Powder	0.04 - 3.8 mg/l	530	-	530	530	-	510	510	DPD ^{1,2}	24 mm ø	
Chromium (III, VI) ^{b)}	0.005 - 0.5 mg/l 0.02 - 2 mg/l	- -	- -	- 530	- 530	542 542	542 542	542 542	1,5-Diphenylcarbozide ^{1,2}	50 mm ø 16 mm ø	
COD LR ^{b)} (ISO 15705:2002)	3 - 150 mg/l	430	430	430	430	420	443	443	Dichromate / H ₂ SO ₄ ^{1,2}	16 mm ø	
COD MLR ^{b)} (ISO 15705:2002) 	15 - 300 mg/l 15 - 300 mg/l	430 -	430 -	430 -	430 -	- 445	- 445	- 445	Dichromate / H ₂ SO ₄ ^{1,2}	16 mm ø	
COD MR ^{b)} (ISO 15705:2002)	20 - 1500 mg/l	610	610	610	610	620	596	596	Dichromate / H ₂ SO ₄ ^{1,2}	16 mm ø	
COD HR ^{b)}	200 - 15000 mg/l	610	610	610	610	620	602	602	Dichromate / H ₂ SO ₄ ^{1,2}	16 mm ø	
Copper ^{a)}	0.05 - 5 mg/l 0.05 - 1 mg/l 0.3 - 5 mg/l 0,5 - 5 mg/l	560 - 530 -	560 - - -	560 - - -	560 - - -	- 559 - 559	559 559 -	559 559 -	Biquinoline ⁴	24 mm ø 50 mm ø 24 mm ø	

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Legend

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³ Photometrische Analysenverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart; 1989

⁴ Photometrische Analyse, Lange/Vejdelek, Verlag Chemie; 1980

⁵ Colorimetric Chemical Analytical Methods, 9th Edition, Lovibond®

Display	Reagent	Form of reagent/ Quantity	Order code
Cl ₂	VARIO Chlorine FREE-DPD/F10	Powder Pack / 100	453 01 80
	VARIO Chlorine TOTAL-DPD/F10	Powder Pack / 100	453 01 90
Cl ₂	VARIO Chlorine FREE-DPD/F10	Powder Pack / 100	453 01 00
	VARIO Chlorine TOTAL-DPD/F10	Powder Pack / 100	453 01 20
Cl ₂	ACIDIFYING GP	Tablet / 100	451 54 80 BT
	CHLORINE HR (KI)	Tablet / 100	451 30 00 BT
	Combi pack# CHLORINE HR (KI)/ACIDIFYING GP	each 100	451 77 21 BT
	Combi pack# CHLORINE HR (KI)/ACIDIFYING GP	each 250	451 77 22 BT
ClO ₂	DPD No. 1	Tablet / 100	451 10 50 BT
	DPD No. 3	Tablet / 100	451 10 80 BT
	Combi pack# DPD No.1 / No.3	each 100	451 77 11 BT
	Combi pack# DPD No.1 / No.3	each 250	451 77 12 BT
	GLYCINE ^{f)}	Tablet / 100	451 21 70 BT
	Combi pack# DPD No.1 / GLYCINE	each 100	451 77 31 BT
	Combi pack# DPD No.1 / GLYCINE	each 250	451 77 32 BT
	DPD No. 1 HIGH CALCIUM ^{e)}	Tablet / 100	451 57 40 BT
	DPD No. 3 HIGH CALCIUM ^{e)}	Tablet / 100	451 57 30 BT
	Combi Pack# DPD No.1 / No.3 HIGH CALCIUM ^{e)}	each 100	451 77 81 BT
Combi Pack# DPD No.1 / No.3 HIGH CALCIUM ^{e)}	each 250	451 77 82 BT	
ClO ₂	Chlorine FREE-DPD/F10	Powder Pack / 100	453 01 00
	GLYCINE ^{f)}	Tablet / 100	451 21 70 BT
Cr	PERSULF. RTG FOR CR	Powder Pack / 100	453 73 00
	Chromium Hexavalent	Powder Pack / 100	453 73 10
O ₂	Reaction tube 0-150 mg/l	Tube test / 25	42 07 20 with barcode
	Reaction tube 0-150 mg/l, mercury free* *without chloride removal	Tube test / 25	42 07 10 with barcode
O ₂	Reaction tube 15-300 mg/l	Tube test / 25	2 42 31 20-A with barcode
O ₂	Reaction tube 0-1500 mg/l	Tube test / 25	42 07 21 with barcode
	Reaction tube 0-1500 mg/l, mercury free* *without chloride removal	Tube test / 25	42 07 11 with barcode
O ₂	Reaction tube 0-15000 mg/l	Tube test / 25	42 07 22 with barcode
	Reaction tube 0-15000 mg/l, mercury free* *without chloride removal	Tube test / 25	42 07 12 with barcode
Cu	COPPER No. 1	Tablet / 100	451 35 50 BT
	COPPER No. 2	Tablet / 100	451 35 60 BT
	Combi pack# COPPER No.1 / No.2	each 100	451 76 91 BT
	Combi pack# COPPER No.1 / No.2	each 250	451 76 92 BT

^{a)} determination of free, combined and total
^{b)} Reactor is necessary for COD (150°C), TOC (120°C) and total -chromium, - phosphate, -nitrogen, (100°C)
^{c)} AL450: Adapter is necessary for Vacu-cuvettes® (Order code 19 20 75)
^{d)} Spectroquant® is a Merck KGaA Trademark
^{e)} alternative reagent, used instead of DPD No.1 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity
^{f)} additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine
^{g)} Reagent recovers most insoluble iron oxides without digestion
^{h)} additionally required for samples with hardness values above 300 mg/l CaCO₃
ⁱ⁾ high range by dilution
^{j)} Vacu-cuvettes® is a Chemetrics Trademark
[#] including stirring rod

Reagents

Wave lengths λ / nm

Test	Range	Wave lengths λ / nm							Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL800	XD 7000	XD 7500		
Copper ^{o)}	0.05 - 4 mg/l	-	-	560	-	-	560	560	Bicinchoninate	24 mm ø
Copper, free VARIO	0.05 - 5 mg/l	560	-	560	560	560	560	560	Bicinchoninate	24 mm ø
Cyanide	0.01 - 0.5 mg/l 0.005 - 0.2 mg/l	-	-	580	580	585	585	585	Pyridine-barbituric acid ¹	24 mm ø 50 mm o
Cyanuric acid	0 - 160 mg/l	530	530	530	530	530	530	530	Melamine	24 mm ø
DEHA	20 - 500 μ g/l	-	-	560	560	562	562	562	PPST ³	24 mm ø
DEHA VARIO	20 - 500 μ g/l	560	-	560	560	562	562	562	PPST ³	24 mm ø
Fluoresceine (only MD 640)	10 - 400 ppb	-	-	> 395	-	-	-	-	Fluorescence	24 mm ø
Fluoride	0.05 - 2 mg/l 0.05 - 1.5 mg/l	580	-	580	580	-	580	580	SPADNS ²	24 mm ø
Formaldehyde	1 - 5 mg/l 0.02 - 1 mg/l	-	-	-	-	585	585	585	H ₂ SO ₄ / Chromotropic acid	10 mm o 50 mm o
Formaldehyde	0.1 - 5 mg/l	-	-	-	-	575	575	575	H ₂ SO ₄ / Chromotropic acid	16 mm ø
Hardness, calcium	50 - 900 mg/l	-	-	560	560	-	560	560	Murexide ⁴	24 mm ø
Hardness, calcium	20 - 500 mg/l	560	560	560	560	-	560	560	Murexide ⁴	24 mm ø
Hardness, total	2 - 50 mg/l 20 - 500 mg/l ⁵⁾	560 560	-	560 560	560 560	571 571	571 571	571 571	Metallphthalein ³	24 mm ø
Hazen (Pt-Co-units ; APHA)	10 - 500 mg/l 10 - 500 mg/l	430	-	430	430	-	455	455	Direct reading ^{1,2}	24 mm ø 50 mm o
		-	-	-	-	455	455	455		

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Display	Reagent	Form of reagent/Quantity	Order code
Cu	KS240 (Coppercol Reagent 1) KS241 (Coppercol Reagent 2) KS242 (Coppercol Reagent 3) COPPER No.2	Liquid reagent / 30 ml Liquid reagent / 30 ml Powder / 10 g Tablet / 100 Set	56L024030 56L024130 56L024210 451 35 60 BT 56R023355
Cu	Vario Cu 1 F10	Powder Pack / 100	453 03 00
CN	Cyanid-11 / Cyanid-12 / Cyanid-13	Reagent test (Powder, Liquid reagent) / 200 Tests	41 88 75
Cys	CyA-TEST	Tablet / 100	451 13 70 BT
DEHA	DEHA Solution DEHA	Liquid reagent / 100 ml Tablet / 100	46 11 81 451 32 20 BT
DEHA	VARIO OXYSCAV 1 RGT VARIO DEHA 2 RGT	Powder Pack / 200 Solution / 100 ml Set	453 60 00
Fluoresceine	no reagents required		
F	SPADNS Reagent Fluoride Standard Reagent solution and standard required	Liquid reagent / 250 ml Liquid reagent / 500 ml Solution / 30 ml	46 74 81 46 74 82 20 56 30
HCHO	Spectroquant® 1.14678.0001 ^{d)}	Reagent test / ca. 50-75 Tests	42 07 51
HCHO	Spectroquant® 1.14500.0001 ^{d)}	Tube test / 25	42 07 52
CaCO ₃	CALCHECK	Tablet / 100	451 56 50 BT
CaCO ₃	Combi pack# CALCIO H No.1 / No.2 Combi pack# CALCIO H No.1 / No.2	each 100 each 250	451 77 61 BT 451 77 62 BT
CaCO ₃	HARDCHECK P	Tablet / 100 Tablet / 250	451 56 60 BT 451 56 61 BT
Pt-Co-units	no reagents required	-	-

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^{f)} additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine

^{g)} Reagent recovers most insoluble iron oxides without digestion

^{h)} additionally required for samples with hardness values above 300 mg/l CaCO₃

ⁱ⁾ high range by dilution

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Wave lengths λ / nm

Test	Range	Wave lengths λ / nm								Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL800	XD 7000	XD 7500			
Hydrazine	0.05 - 0.5 mg/l	430	-	430	430	455	455	455	Dimethylamino-benzaldehyde ³	24 mm ø	
Hydrazine	0.01 - 0.6 mg/l 0.005 - 0.6 mg/l	-	-	430	430	-	-	-	Dimethylamino-benzaldehyde ³	24 mm ø	
Hydrazine ^{e)}	0.01 - 0.7 mg/l	-	-	430	430	-	430	430	PDMA B	24 mm ø	
Hydrogen peroxide	0.03 - 3 mg/l 0.01 - 0.5 mg/l 0.03 - 1.5 mg/l	-	-	530	530	-	510	510	DPD/Catalyst ⁵	24 mm ø 50 mm ø 24 mm ø	
Hydrogen peroxide	1 - 50 mg/l 40 - 500 mg/l ^{b)}	-	430	430	430	-	430	430	Peroxotitanium acid	24 mm ø	
Iodine	0.05 - 3.6 mg/l	-	-	530	530	510	510	510	DPD ⁵	24 mm ø	
Iron (II, III) soluble	0.02 - 1 mg/l 0.01 - 0.5 mg/l 0.1 - 1 mg/l 0.05 - 1 mg/l	560	560	560	560	-	562	562	PPST ³	24 mm ø 50 mm ø 10 mm ø 10 mm ø	
Iron VARIO (II, III) soluble	0.02 - 3 mg/l 0.1 - 3 mg/l	530	-	530	530	-	510	510	1,10-Phenanthroline ²	24 mm ø	
Iron VARIO, total ^{g)}	0.02 - 1.8 mg/l 0.1 - 1.8 mg/l	580	-	580	580	-	590	590	TPTZ ^{g)}	24 mm ø	
Iron LR (Fe ²⁺ / ³⁺)	0.03 - 2.0 mg/l 0.03 - 2.0 mg/l	560 530	-	560	-	-	560	560	Ferrozine / Thioglycolate	24 mm ø	
Iron LR 2 (Fe ²⁺ and Fe ³⁺)	0.03 - 2.0 mg/l	-	-	560	-	-	560	560	Ferrozine / Thioglycolate	24 mm ø	
Iron HR	0.1 - 10 mg/l	-	-	530	-	-	530	530	Thioglycolate	24 mm ø	
Iron, total, Fe in Mo	0.01 - 1.8 mg/l	580	-	580	-	-	580	580	Fe in Mo	24 mm ø	
Lead (Pb ²⁺)	0.1 - 5 mg/l	-	-	-	-	520	520	520	4-(2-Pyridylazo)-resorcine	10 mm ø	

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Display	Reagent	Form of reagent/Quantity	Order code
N ₂ H ₄	Hydrazine Test Powder Spoon	Powder / 30 g	46 29 10 38 49 30
N ₂ H ₄	VARIO Hydra 2 Rgt Solution	Solution / 100 ml	453 12 00
N ₂ H ₄	Vacu-cuvette® ^{l)}	Test Kit / 30 Adapter for Vacu-cuvettes® ^{l)}	38 04 70 19 20 75
H ₂ O ₂	HYDROGENPEROXIDE LR	Tablet / 100	451 23 80 BT
H ₂ O ₂	H ₂ O ₂ reagent solution	Liquid reagent / 15 ml	42 49 91
I	DPD No. 1	Tablet / 100	451 10 50 BT
Fe	IRON LR (Fe ²⁺ and Fe ³⁺) IRON (II) LR (Fe ²⁺)	Tablet / 100 Tablet / 100	451 53 70 BT 451 54 20 BT
Fe	VARIO Ferro F10	Powder Pack / 100	453 05 60
Fe	VARIO IRON TPTZ F10	Powder Pack / 100	453 05 50
Fe	KS61 (Ferrozine / Thioglycolate, FE5) KS63 (Thioglycolate Reagenz, FE6) KP962 (Ammonia Persulphate Powder) KS135 (Phenolphthalein / Indicator) KS144 (Calcium Hardness Buffer)	Liquid reagent / 65 ml Liquid reagent / 65 ml Powder Liquid reagent / 65 ml Liquid reagent / 65 ml	56L006165 56L006365 56P096240 56L013565 56L014465
Fe	KS60 FE1 (Acetate Buffer) KS63 FE6 (Thioglycolate Reagent) KS65 FE7 (Ferrozine Reagent)	Liquid reagent / 65 ml Liquid reagent / 65 ml Liquid reagent / 65 ml Set	56L006065 56L006365 56L006565 56R023490
Fe	KS160 TH2 FE8 (Total Hardness Buffer) KS63 FE6 (Thioglycolate Reagent)	Liquid reagent / 65 ml Liquid reagent / 65 ml Set	56L016065 56L006365 56R023590
Fe	VARIO (Fe in Mo) Rgt 1 VARIO (Fe in Mo) Rgt 2	Powder Pack / 100 Powder Pack / 100 Set	453 03 10 453 03 20 453 60 10
Pb	Spectroquant® 1.09717.0001 ^{d)}	Reagent test / 50 Tests	42 07 53

^{a)} determination of free, combined and total

^{b)} Reactor is necessary for COD (150°C), TOC (120°C) and total -chromium, - phosphate, -nitrogen, (100°C)

^{c)} AL450: Adapter is necessary for Vacu-cuvettes® (Order code 19 20 75)

^{d)} Spectroquant® is a Merck KGaA Trademark

^{e)} alternative reagent, used instead of DPD No.1 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity

^{f)} additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine

^{g)} Reagent recovers most insoluble iron oxides without digestion

^{h)} additionally required for samples with hardness values above 300 mg/l CaCO₃

ⁱ⁾ high range by dilution

^{l)} Vacu-cuvettes® is a Chemetrics Trademark

including stirring rod

Reagents

Test	Range	Wave lengths λ / nm							Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL600	XD 7000	XD 7500		
Lead (Pb²⁺)	0.1 - 5 mg/l	-	-	-	-	515	515	515	4-(2-Pyridylazo)-resorcine	16 mm \emptyset
Manganese	0.2 - 4 mg/l	530	-	530	530	450	450	450 560 560	Formaldehyde	24 mm \emptyset
Manganese VARIO LR	0.01 - 0.7 mg/l	560	-	560	560	558	558	558	PAN	24 mm \emptyset
Manganese VARIO HR	0.1 - 18 mg/l	530	-	530	530	525	525	525	Periodate oxidation ²	24 mm \emptyset
Manganese	0.05 - 5 mg/l	-	-	430	-	-	450	450	Formaldehyde	24 mm \emptyset
Molybdate / Molybdenum	1 - 50 mg/l 1 - 30 mg/l 0.6 - 30 mg/l	- - 430	- - -	430 - -	430 - -	- 366 -	366 -	366 -	Thioglycolate ⁴	24 mm \emptyset
Molybdate / Molybdenum VARIO LR 45	0.05 - 5 mg/l 0.03 - 3 mg/l	- 610	- -	610 610	610 610	610 610	610 610	610 610	Mercaptoacetic acid	24 mm \emptyset
Molybdate / Molybdenum VARIO HR	0.5 - 66 mg/l 0.3 - 40 mg/l	- 430	- -	430 430	430 430	420 420	420 420	420 420	Mercaptoacetic acid	24 mm \emptyset
Molybdate / Molybdenum HR	1 - 100 mg/l 0.6 - 60 mg/l	- 430	- -	430 430	- -	- -	430 430	430 430	Thioglycolate ⁴	24 mm \emptyset
Nickel	0.02 - 1 mg/l 0.2 - 7 mg/l	- -	- -	- 430	- 430	443 443	443 443	443 443	Dimethylglyoxime ^{2,3}	50 mm \emptyset 24 mm \emptyset
Nickel	0.1 - 10 mg/l	-	-	560	560	-	-	-	Nioxime	24 mm \emptyset
Nitrate	0.08 - 1 mg/l 0,35 - 4,4 mg/l	- -	- -	530 530	- -	- -	530 530	530 530	Zinc reduction / NED	24 mm \emptyset

Material safety data sheets: www.aqualytic.de

For other reagent quantities please see our current price list.

Legend

¹ Deutsche Einheitsverfahren zur Wasser-, Abwasser- und Schlamm- Untersuchung

² Standard Methods for the Examination of Water and Wastewater, 18th Edition; 1992

³ Photometrische Analysenverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart; 1989

⁴ Photometrische Analyse, Lange/Vejdelek, Verlag Chemie; 1980

⁵ Colorimetric Chemical Analytical Methods, 9th Edition, Lovibond®

Display	Reagent	Form of reagent/Quantity	Order code
Pb	Spectroquant® 1.14833.0001 ^{d)}	Tube test / 25	42 07 54
Mn	MANGANESE LR 1 MANGANESE LR 2 Combi pack# MANGANESE LR 1 / LR 2 Combi pack# MANGANESE LR 1 / LR 2	Tablet / 100 Tablet / 100 each 100 each 250	451 60 80 BT 451 60 90 BT 451 76 21 BT 451 76 22 BT
Mn	VARIO Ascorbic Acid VARIO Alkaline-Cyanide VARIO PAN Indicator VARIO Rochelle Salt Solution ^{h)}	Powder Pack / 100 Liquid reagent / 60 ml Liquid reagent / 60 ml Set 30 ml	453 50 90 453 06 40
Mn	VARIO Manganese Citrate Puffer F10 VARIO Sodiumperiodate F10	Powder Pack / 100 Powder Pack / 100 Set	453 51 00
Mn	KS265 Manganese Reagent A KS266 Manganese Reagent B KS267 Manganese Reagent C	Liquid reagent / 30 ml Liquid reagent / 30 ml Liquid reagent / 30 ml Set	56L026530 56L026630 56L030430 56R024055
MoO ₄	MOLYBDATE No.1 HR	Tablet / 100	451 30 60 BT
MoO ₄ Mo	MOLYBDATE No.2 HR Combi pack# MOLYBDATE No.1 HR / No.2 HR Combi pack# MOLYBDATE No.1 HR / No.2 HR	Tablet / 100 each 100 each 250	451 30 70 BT 451 76 31 BT 451 76 32 BT
MoO ₄ Mo	VARIO Molybdenum 1 LR F20 VARIO Molybdenum 2 LR required accessory: mixing cylinder (not included)	Powder Pack / 100 Liquid reagent/ 50 ml Set	453 54 50
MoO ₄ Mo	VARIO Molybdenum HR1 F10 VARIO Molybdenum HR2 F10 VARIO Molybdenum HR3 F10	Powder Pack / 100 Powder Pack / 100 Powder Pack / 100 Set	453 53 00
MoO ₄	KS63 (Thioglycolate Reagent)	Liquid reagent / 65 ml	56L006365
Ni	Nickel-51, Nickel-52	Reagent test (Powder, Liquid reagent) / 50 Tests	41 90 33
Ni	NICKEL No.1 NICKEL No.2	Tablet / 100 Tablet / 100	451 56 30 BT 451 56 40 BT
NO ₃ - N NO ₃	NITRATE TEST Powder NITRATE TEST Tablet NITRITE LR Nitrate test tube	Powder / 15 g Tablet / 100 Tablet / 100	46 52 30 50 28 10 51 23 10 BT 36 62 20

^{d)} determination of free, combined and total

^{b)} Reactor is necessary for COD (150°C), TOC (120°C) and total -chromium, - phosphate, -nitrogen, (100°C)

^{c)} AL450: Adapter is necessary for Vacu-cuvettes® (Order code 19 20 75)

^{d)} Spectroquant® is a Merck KGaA Trademark

^{e)} alternative reagent, used instead of DPD No.1 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity

^{f)} additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine

^{g)} Reagent recovers most insoluble iron oxides without digestion

^{h)} additionally required for samples with hardness values above 300 mg/l CaCO₃

ⁱ⁾ high range by dilution

^{j)} Vacu-cuvettes® is a Chemetrics Trademark

including stirring rod

Reagents

Test	Range	Wave lengths λ / nm							Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL600	XD 7000	XD 7500		
Nitrate VARIO	1 - 30 mg/l	-	-	430	430	410	410	410	Chromotropic acid	16 mm \emptyset
	4,4 - 132 mg/l	-	-	430	430	410	410	410		
Nitrate DMP	0,5 - 14 mg/l	-	-	-	-	340	340	340	2,6-Dimethylphenole ³	16 mm \emptyset
	2,2 - 62 mg/l	-	-	-	-	-	-	340		
Nitrite	0,01 - 0,5 mg/l	-	-	560	560	545	540	540	N-(1-Naphthyl)- ethylenediamine ^{2,3}	24 mm \emptyset
	0,03 - 0,16 mg/l	-	-	560	560	545	540	540		
Nitrite	0,03 - 0,6 mg/l	-	-	-	-	545	545	545	Sulfanilic/Naphthylamine ¹	16 mm \emptyset
	0,1 - 2 mg/l	-	-	-	-	545	545	545		
	0,3 - 3 mg/l	-	-	-	-	545	545	545		
	1 - 10 mg/l	-	-	-	-	545	545	545		
Nitrite HR	0,03 - 3 mg/l	-	-	-	-	545	545	545	Sulfanilic/ Naphthylaminen ¹	16 mm \emptyset
	1 - 10 mg/l	-	-	-	-	-	-	545		
Nitrite LR	0,03 - 0,6 mg/l	-	-	-	-	545	545	545	Sulfanilic/Naphthylamine ¹	16 mm \emptyset
Nitrite LR VARIO	0,01 - 0,3 mg/l	-	-	530	530	507	507	507	Diazotation	24 mm \emptyset
	0,03 - 1 mg/l	-	-	530	530	507	507	507		
Nitrogen-total DMP ^{b)}	0,5 - 14 mg/l	-	-	-	-	340	340	340	2,6-Dimethylphenole ^{2,3}	16 mm \emptyset
	5 - 140 mg/l ^{d)}	-	-	-	-	340	340	340		
Nitrogen-total DMP LR	0,5 - 14 mg/l	-	-	-	-	340	340	340	2,6-Dimethylphenole ^{2,3}	16 mm \emptyset
Nitrogen-total DMP HR	5 - 100 mg/l	-	-	-	-	340	340	340	2,6-Dimethylphenole ^{2,3}	16 mm \emptyset
Nitrogen VARIO, total LR ^{b)}	0,5 - 25 mg/l	-	-	430	430	410	410	410	Persulphate- digestion method	16 mm \emptyset
Nitrogen VARIO, total HR ^{b)}	5 - 150 mg/l	-	-	430	430	410	410	410	Persulphate- digestion method	16 mm \emptyset

Material safety data sheets: www.aqualytic.de

For other reagent quantities please see our current price list.

Legend

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³ Photometrische Analysenverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart; 1989

⁴ Photometrische Analyse, Lange/Vejdelek, Verlag Chemie; 1980

⁵ Colorimetric Chemical Analytical Methods, 9th Edition, Lovibond®

Display	Reagent	Form of reagent/Quantity	Order code
NO ₃ - N NO ₃	VARIO Nitrate Chromotropic VARIO Nitra X Reagent tube VARIO Deionised Water (for Zero)	Powder Pack / 50 Reaction tube / 50 Bottle, 100 ml Set (Tube test)	453 55 80
NO ₃ - N NO ₃	Reaction tube, Nitrat-111	Tube test Liquid reagent / 24	42 07 02 ohne Barcode 2 42 33 40-A with barcode
NO ₂ - N NO ₂	NITRITE LR	Tablet / 100	451 23 10 BT
NO ₂ - N NO ₂ NO ₂ - N NO ₂	Reaction tube, Nitrit-101	Tube test (Powder) / 24	41 90 18 ohne Barcode
NO ₂ - N NO ₂	Reaction tube, Nitrit-101	Tube test / 24	2 42 34 70 with Barcode
NO ₂ - N NO ₂	Reaction tube, Nitrit-101	Tube test / 24	2 42 34 20 with Barcode
NO ₂ - N NO ₂	VARIO Nitri 3	Powder Pack / 100	453 09 80
N	Digestion reagent, Compensation reagent, Nitrat-111	Tube test / 24	42 07 03 ohne Barcode
N	Digestion reagent, Compensation reagent, Nitrat-111	Küvettest / 24	2 42 35 40-A with barcode
N	Digestion reagent, Compensation reagent, Nitrat-111	Küvettest / 24	2 42 35 70-A with barcode
N	VARIO TN HYDROX. LR Tubes VARIO PERSULFATE Reagent VARIO TN Reagent A VARIO TN Reagent B VARIO TN ACID LR/HR Tubes VARIO Deionised Water (for Zero)	Digestion tubes / 50 Powder Pack / 50 Powder Pack / 50 Powder Pack / 50 Reaction tubes / 50 Bottle, 100 ml Set (Tube test)	453 55 50
N	VARIO TN HYDROX. HR Tubes VARIO PERSULFATE Reagent VARIO TN Reagent A VARIO TN Reagent B VARIO TN ACID LR/HR Tubes VARIO Deionised Water (for Zero)	Digestion tubes / 50 Powder Pack / 50 Powder Pack / 50 Powder Pack / 50 Reaction tubes / 50 Bottle, 100 ml Set (Tube test)	453 55 60

- ^{a)} determination of free, combined and total
- ^{b)} Reactor is necessary for COD (150°C), TOC (120°C) and total -chromium, - phosphate, -nitrogen, (100°C)
- ^{c)} AL450: Adapter is necessary for Vacu-cuvettes® (Order code 19 20 75)
- ^{d)} Spectroquant® is a Merck KGaA Trademark
- ^{e)} alternative reagent, used instead of DPD No.1 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity
- ^{f)} additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine
- ^{g)} Reagent recovers most insoluble iron oxides without digestion
- ^{h)} additionally required for samples with hardness values above 300 mg/l CaCO₃
- ⁱ⁾ high range by dilution
- ^{j)} Vacu-cuvettes® is a Chemetrics Trademark
- [#] including stirring rod

Reagents

Wave lengths λ / nm

Test	Range	Wave lengths λ / nm								Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL800	XD 7000	XD 7500			
Oxygen, activ	0.1 - 10 mg/l	-	-	530	530	-	545	545	DPD		
Oxygen, dissolved ^{o)}	10 - 800 μ g/l	530	-	530	530	-	-	-	Rhodazine D TM	13 mm \varnothing	
Ozone	0.02 - 1 mg/l	-	-	-	-	510	-	-	DPD/Glycine ⁵	24 mm \varnothing 50 mm \varnothing 24 mm \varnothing	
	0.02 - 0.5 mg/l	-	-	-	-	510	510	510			
	0.02 - 2 mg/l	530	-	530	530	-	510	510			
Ozon Powder	0,015 - 2 mg/l	-	-	530	530	510	510	510	DPD/Glycine ⁵	24 mm \varnothing	
Phenols	0.1 - 5 mg/l	-	-	-	-	507	507	507	4-Aminoantipyrine ¹	24 mm \varnothing	
PHMB (Biguanide)	2 - 60 mg/l	-	-	560	560	-	560	560	Buffer/Indicator	24 mm \varnothing	
Phosphate-total LR ^{b)}	0.07 - 3 mg/l	-	-	-	-	690	690	690	Phosphomolybdic acid/ Ascorbic acid ²	16 mm \varnothing	
	0.2 - 10 mg/l	-	-	-	-	690	690	690			
Phosphate-total HR ^{b)}	1.5 - 20 mg/l	-	-	-	-	690	690	690	Phosphomolybdic acid/ Ascorbic acid ²	16 mm \varnothing	
	5 - 60 mg/l	-	-	-	-	690	690	690			
Phosphate LR, ortho	0.016 - 1,3 mg/l	660	-	660	660	710	710	710	Phosphomolybdic acid/ Ascorbic acid ²	24 mm \varnothing	
	0,05 - 4 mg/l	660	-	660	660	610	610	710			
Phosphate HR, ortho	0,33 - 26 mg/l	-	-	430	430	470	470	470	Vanadomolybdate ²	24 mm \varnothing	
	1 - 80 mg/l	-	-	430	430	-	470	470			
Phosphate VARIO ortho	0.02 - 0,82 mg/l	660	-	660	660	890	890	890	Phosphomolybdenum blue/ Ascorbic acid ²	24 mm \varnothing	
	0,06 - 2,5 mg/l	660	-	660	660	-	890	890			
Phosphate VARIO ortho	0.02 - 1,6 mg/l	-	-	660	660	890	890	890	Phosphomolybdenum blue/ Ascorbic acid ²	16 mm \varnothing	
	0.06 - 5 mg/l	-	-	660	660	-	890	890			
Phosphate-ortho	1 - 20 mg/l	-	-	-	-	438	438	438	Vanadomolybdate ²	16 mm \varnothing	
	3 - 60 mg/l	-	-	-	-	-	438	438			

Material safety data sheets: www.aqualytic.de

For other reagent quantities please see our current price list.

Legend

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Display	Reagent	Form of reagent/Quantity	Order code
O ₂	DPD No. 4	Tablet / 100	451 12 20 BT
O ₂	Vacu-cuvette® ^{d)}	Liquid reagent / 30 Adapter for Vacu-cuvettes® ^{d)}	38 04 50 19 20 75
O ₃	DPD No. 1 DPD No. 3 Combi pack# DPD No.1 / No.3 Combi pack# DPD No.1 / No.3 GLYCINE ^{f)} Combi pack# DPD No.1 / GLYCINE Combi pack# DPD No.1 / GLYCINE	Tablet / 100 Tablet / 100 each 100 each 250 Tablet / 100 each 100 each 250	451 10 50 BT 451 10 80 BT 451 77 11 BT 451 77 12 BT 451 21 70 BT 451 77 31 BT 451 77 32 BT
O ₃	Chlorine total - DPD /F10 GLYCINE	Powder Pack / 100 Tablet / 100	453 01 20 451 21 70 BT
C ₆ H ₅ O _H	PHENOLE No. 1 PHENOLE No. 2	Tablet / 100 Tablet / 100	451 59 50 BT 451 59 60 BT
PHMB	PHMB PHOTOMETER	Tablet / 100	451 61 00 BT
PO ₄ - P PO ₄	Reaction tube, Phosphate-101, Phosphate- 102, Phosphate-103	Tube test / 24	41 90 19 with bar- code
PO ₄ - P PO ₄	Reaction tube, Phosphate-101, Phosphate-102, Phosphate-103	Tube test (Powder, Liquid reagent) / 24	42 07 00 with bar- code
PO ₄ - P PO ₄	PHOSPHATE No. 1 LR PHOSPHATE No. 2 LR Combi pack# PHOSPHATE No.1 LR / No.2 LR	Tablet / 100 Tablet / 100 each 100	451 30 40 BT 451 30 50 BT 451 76 51 BT
PO ₄ - P PO ₄	PHOSPHATE No. 1 HR PHOSPHATE No. 2 HR Combi pack# PHOSPHATE No.1 HR / No.2 HR	Tablet / 100 Tablet / 100 each 100	451 58 10 BT 451 58 20 BT 451 76 61 BT
PO ₄ - P PO ₄	VARIO PHOSPHATE RGT, F10	Powder Pack / 100	453 15 50
PO ₄ - P PO ₄	VARIO Dilution Cuvette VARIO PHOSPHATE RGT, F10 VARIO Deionised Water (for Zero)	50 Tubes Powder Pack / 50 Bottle, 100 ml Set (Tube test)	453 52 00 with barcode
PO ₄ - P PO ₄	Reaction tube	Tube test / 24	2 42 07 01

^{a)} determination of free, combined and total
^{b)} Reactor is necessary for COD (150°C), TOC (120°C) and total -chromium, - phosphate, -nitrogen, (100°C)
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^{d)} Spectroquant® is a Merck KGaA Trademark
^{e)} alternative reagent, used instead of DPD No.1 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity
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^{g)} Reagent recovers most insoluble iron oxides without digestion
^{h)} additionally required for samples with hardness values above 300 mg/l CaCO₃
ⁱ⁾ high range by dilution
^{j)} Vacu-cuvettes® is a Chemetrics Trademark
[#] including stirring rod

Reagents

Test	Range	Wave lengths λ / nm							Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL800	XD 7000	XD 7500		
Phosphate VARIO^{b)} acid hydrolyzable and total	acid hydrolyzable: 0.02 - 1.6 mg/l	-	-	660	660	890	890	890	Acid digestion Phosphomolybdenum blue/ Ascorbic acid ²	16 mm \emptyset
	total: 0.06 - 5 mg/l 0.02 - 1.1 mg/l 0.06 - 3.5 mg/l	-	-	660	660	890	890	890		
Phosphate VARIO total^{b)}	0.02 - 1.1 mg/l	-	-	660	660	890	890	890	Acid-/ Persulphate digestion Ascorbic acid ²	16 mm \emptyset
	0.06 - 3.5 mg/l	-	-	660	660	890	890	890		
Phosphate, ortho^{c)}	0.016 - 1,6 mg/l 0.05 - 5 mg/l	-	-	660	660	-	660	660	Stannous chloride ²	
		-	-	660	660	-	660	660		
Phosphate, ortho^{c)}	1,6 - 13 mg/l 5 - 40 mg/l	-	-	430	430	-	430	430	Vanadomolybdate ²	
		-	-	430	430	-	-	-		
Phosphate LR	0.033 - 3,3 mg/l 0,1 - 10 mg/l	-	-	660	-	-	660	660	Phosphomolybdic acid/ Ascorbic acid ²	24 mm \emptyset
		-	-	660	-	-	-	-		
Phosphate HR, ortho	1,63 - 26 mg/l 5 - 80 mg/l	430	-	430	-	-	430	430	Vanadomolybdate ²	24 mm \emptyset
		430	-	430	-	-	430	430		
Phosphonate VARIO	0.02 - 125 mg/l	-	-	660	660	890	890	890	Persulfate UV-Oxidation	24 mm \emptyset
pH value	5.2 - 6.8	-	-	560	560	-	560	560	Bromcresol purple ⁵	24 mm \emptyset
pH value	6.5 - 8.4	560	560	560	560	558	558	558	Phenol red ⁵	24 mm \emptyset
pH value	6.5 - 8.4	560	560	560	560	558	558	558	Phenol red ⁵	24 mm \emptyset
pH value	8.0 - 9.6	-	-	560	560	-	560	560	Thymol blue ⁵	24 mm \emptyset
Polyacrylates	1 - 30 mg/l	530	-	660	-	-	660	660	Turbidity	24 mm \emptyset

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Legend

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³ Photometrische Analysenverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart; 1989

⁴ Photometrische Analyse, Lange/Vejdelek, Verlag Chemie; 1980

⁵ Colorimetric Chemical Analytical Methods, 9th Edition, Lovibond®

Display	Reagent	Form of reagent/Quantity	Order code
PO ₄ - P	VARIO Acid Reagent Cuvette	50 Tubes	
PO ₄	VARIO PHOSPHATE RGT, F10	Powder Pack / 50	
PO ₄ - P	VARIO Deionised Water (for Zero)	Bottle, 100 ml	
PO ₄	1N NaOH	Bottle / 100 ml	
PO ₄ - P	1,54 N NaOH	Bottle / 100 ml	
PO ₄	VARIO Potassium Persulfate F10	Powder Pack / 50	453 52 50 with barcode
	Set (Tube test)		
PO ₄ - P	VARIO Acid Reagent Cuvette	50 Tubes	
PO ₄	VARIO PHOSPHATE RGT, F10	Powder Pack / 50	
PO ₄	VARIO Deionised Water (for Zero)	Bottle, 100 ml	
	1,54 N NaOH	Bottle / 100 ml	
	VARIO Potassium Persulfate F10	Powder Pack / 50	453 52 10 with barcode
	Set (Tube test)		
PO ₄ - P	Vacu-cuvette® ^{d)}	Test Kit / 30	38 04 80
PO ₄		Adapter for Vacu-cuvettes® ^{d)}	19 20 75
PO ₄ - P	Vacu-cuvette® ^{d)}	Test Kit / 30	38 04 60
PO ₄		Adapter for Vacu-cuvettes® ^{d)}	19 20 75
PO ₄ - P	KS80 (CRP Reagent)	Liquid reagent / 2 x 65 ml	56L008065
PO ₄	KP119 (Ascorbic acid)	Powder / 20 g	56P011920
		Set	56R023765
PO ₄ - P	KS228 (Ammonia Molybdate)	Liquid reagent / 65 ml	56L022865
PO ₄	KS229 (Ammonia Metavanadate)	Liquid reagent / 65 ml	56L022965
		Set	56R019090
	Option Polyphosphate		
	KS278 (50 % Sulfuric Acid)	Liquid reagent / 65 ml	56L027865
	KS135 (Phenolphthalein Indicator)	Liquid reagent / 65 ml	56L013565
	KS144 (Calcium Hardness Buffer)	Liquid reagent / 65 ml	56L014465
	KP962 (Ammonium Persulphate Powder)	Powder / 40 g	56P096240
PO ₄	VARIO Potassium Persulfate F10	Powder Pack / 100	
	VARIO PHOSPHATE RGT, F10	Powder Pack / 200	
		Set	53 52 20
pH	BROMOCRESOLPURPLE/PHOTOMETER	Tablet / 100	451 57 00 BT
pH	PHENOL RED / PHOTOMETER	Tablet / 100	451 17 70 BT
pH	PHENOL RED Solution	Liquid reagent / 15 ml	47 10 40
pH	THYMOLBLUE / PHOTOMETER	Tablet / 100	451 57 10 BT
Polyacryl	KS255 (Polyacrylate Reagent 1)	Liquid reagent / 65 ml	56L025565
	KS256 (Polyacrylate Reagent 2)	Liquid reagent / 65 ml	56L025665
		Set	56R019165
	KS336 (Propan-2-ol)	Liquid reagent / 65 ml	56L033665
	C18 (Cartouche)		56A020101
	KS173 (2,4 Dinitrophenol)	Liquid reagent / 65 ml	56L017365
	KT183 (Nitric Acid)	Liquid reagent / 65 ml	56L018365



- a) determination of free, combined and total
b) Reactor is necessary for COD (150°C), TOC (120°C) and total -chromium, - phosphate, -nitrogen, (100°C)
c) AL450: Adapter is necessary for Vacu-cuvettes® (Order code 19 20 75)
d) Spectroquant® is a Merck KGaA Trademark
e) alternative reagent, used instead of DPD No.1 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity
f) additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine
g) Reagent recovers most insoluble iron oxides without digestion
h) additionally required for samples with hardness values above 300 mg/l CaCO₃
i) high range by dilution
j) Vacu-cuvettes® is a Chemetrics Trademark
including stirring rod

Reagents

Wave lengths λ / nm

Test	Range	Wave lengths λ / nm								Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL800	XD 7000	XD 7500			
Potassium	0.7 - 12 mg/l	-	-	430	430	-	730	730	Tetraphenylborate-	24 mm \emptyset	
	1 - 10 mg/l	-	-	-	-	730	-	-	Turbidity ⁴	24 mm \emptyset	
PTSA (only MD 640)	10 - 1000 ppb	-	-	> 395	-	-	-	-	Fluorescence	24 mm \emptyset	
Silica	0.05 - 4 mg/l	660	-	660	660	-	820	820	Silicomolybdate ^{2,3}	24 mm \emptyset	
	0.05 - 3 mg/l	-	-	-	-	820	-	-			
	0,05 - 4 mg/l	-	-	-	-	-	-	-			
Silica VARIO LR	0.1 - 1.6 mg/l	660	-	660	660	815	815	815	Heteropolyblue ²	24 mm \emptyset	
Silica VARIO HR	1 - 90 mg/l	430	-	430	430	-	452	452	Silicomolybdate ^{2,3}	24 mm \emptyset	
	1 - 100 mg/l	-	-	-	-	452	452	452			
Silica	0.1 - 8 mg/l	-	-	430	-	-	660	660	Heteropolyblue ²	24 mm \emptyset	
Sodiumhypochlorite	0.2 - 16 %	-	-	530	530	-	470	470	Potssium iodide ⁵	24 mm \emptyset	
Spectral Absorption-coefficient (S.A.K)	0,5 - 50 m ⁻¹	-	-	-	-	-	-	254	Direct reading ¹	50 mm o	
		-	-	-	-	436	436	436			
		-	-	-	-	525	436	436			
		-	-	-	-	620	620	620			
Sulphate VARIO	5 - 100 mg/l	530	-	530	530	-	530	530	Bariumsulphate Turbidity ²	24 mm \emptyset	
	2 - 100 mg/l	-	-	-	-	450	-	-			
	50 - 1000 mg/l	-	-	530	530	530	530	530			
Sulphate	5 - 100 mg/l	-	-	610	610	-	610	610	Bariumsulphate Turbidity ²	24 mm \emptyset	
Sulphide	0.04 - 0.5 mg/l	-	-	660	660	668	668	668	DPD/Catalyst ^{3,4}	24 mm \emptyset	
Sulphite	0.1 - 5 mg/l	-	-	430	430	-	405	405	DTNB	24 mm \emptyset	
	0.1 - 10 mg/l	-	-	-	-	405	405	405			
	0.05 - 4 mg/l	-	-	-	-	405	-	-			

Material safety data sheets: www.aqualytic.de

For other reagent quantities please see our current price list.

Legend

¹ Deutsche Einheitsverfahren zur Wasser-, Abwasser- und Schlamm- Untersuchung

² Standard Methods for the Examination of Water and Wastewater, 18th Edition; 1992

³ Photometrische Analysenverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart; 1989

⁴ Photometrische Analyse, Lange/Vejdelek, Verlag Chemie; 1980

⁵ Colorimetric Chemical Analytical Methods, 9th Edition, Lovibond®

Display	Reagent	Form of reagent/Quantity	Order code
K	POTASSIUM T	Tablet / 100	451 56 70
PTSA	no reagents required		
SiO ₂	SILICA No. 1 SILICA No. 2 Combi pack# SILICA No.1 / No.2 Combi pack# SILICA No.1 / No.2 SILICA PR	Tablet / 100 Tablet / 100 each 100 each 250 Tablet / 100	451 31 30 BT 451 31 40 BT 451 76 71 BT 451 76 72 BT 451 31 50 BT
SiO ₂	VARIO Amino Acid F10 VARIO Citric Acid F10 VARIO Molybdate 3 Reagent solution	Powder Pack / 100 Powder Pack / 200 Liquid reagent / 2 x 50 ml Set	453 56 90
SiO ₂	VARIO Silica HR Molybdate F10 VARIO Silica HR Acid Rgt F10 VARIO Silica HR Citric Acid F10	Powder Pack / 100 Powder Pack / 100 Powder Pack / 100 Set	453 57 00
SiO ₂	KS104 (Silica Reagent 1) KS105 (Silica Reagent 2) KP106 (Silica Reagent 3)	Liquid reagent / 65 ml Liquid reagent / 65 ml Powder / 10 g Set	56L010465 56L010565 56P010610 56R023856
NaOCl	ACIDIFYING GP CHLORINE HR (KI) Combi pack# CHLORINE HR (KI)/ACIDIFYING GP Combi pack# CHLORINE HR (KI)/ACIDIFYING GP Dilution set for sample preparation	Tablet / 100 Tablet / 100 each 100 each 250 1 set	451 54 80 BT 451 30 00 BT 451 77 21 BT 451 77 22 BT 41 44 70
-	no reagents required	-	-
SO ₄	VARIO Sulpha 4 / F10	Powder Pack / 100	453 21 60
SO ₄	SULFATE T	Tablet / 100	451 54 50 BT
S	SULFIDE No. 1 SULFIDE No. 2	Tablet / 100 Tablet / 100	450 29 30 450 29 40
SO ₃	SULFITE LR	Tablet / 100	451 80 20 BT

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Reagents

Wave lengths λ / nm

Test	Range	Wave lengths λ / nm							Method	Cuvette
		AL100 & AL110	AL200	AL400, AL410	AL450	AL800	XD 7000	XD 7500		
Surfactants (anionic)	0,05 - 2 mg/l	-	-	660	660	660	660	660	Methylene blue ¹	16 mm ø
Surfactants (cationic)	0,05 - 1,5 mg/l	-	-	610	610	610	610	610	Disulphine blue	16 mm ø
Surfactants (non ionic)	0,1 - 7,5 mg/l	-	-	610	610	610	610	610	TBPE	16 mm ø
Suspended solids	5 - 750 mg/l	660	-	660	660	-	810	810	Turbidity/Attenuated Radiation	24 mm ø 50 mm ø
						660	810	810		
TOC ^{b)}	5 - 80 mg/l	-	-	610	610	596	610	610	H ₂ SO ₄ / Indicator	16 mm ø
TOC ^{b)}	50 - 800 mg/l	-	-	610	610	596	610	610	H ₂ SO ₄ / Indicator	16 mm ø
Triazoles (UV lamp requested)	1 - 16 mg/l	430	-	430	-	-	430	430	Catalyzed UV Digestion	24 mm ø
Turbidity	5 - 500	-	-	-	-	860	860	860	Attenuated Radiation Method	50 mm ø
	0 - 1000	-	-	530	530	-	860	860	Attenuated Radiation Method	24 mm ø
Urea	0,1 - 2,5 mg/l	610	610	610	610	-	676	676	Urease / Indophenol	24 mm ø
	0,2 - 5 mg/l ^{b)}	610	610	-	-	-	-	-		
	0,1 - 2 mg/l	-	-	-	-	676	-	-		
Zinc	0,02 - 1 mg/l	-	-	610	610	-	616	616	Zincon ³ /EDTA	24 mm ø
	0,02 - 0,5 mg/l	-	-	-	-	616	-	-		
Zinc	0,1 - 2,5 mg/l	-	-	610	-	-	610	610	Zincon ³ /EDTA	24 mm ø

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Display	Reagent	Form of reagent/Quantity	Order code
MBAS	Spectroquant® 1.02552.0001	Tube test / 25	42 07 63
CTAB	Spectroquant® 1.01764.0001	Tube test / 25	42 07 65
Triton® X-100	Spectroquant® 1.01787.0001	Tube test / 25	42 07 64
-	no reagents required	-	-
TOC	Spectroquant® 1.14878.0001 ^{d)}	Tube test / 25 Aluminium screwcaps / 6 pc.	42 07 61 42 07 57
TOC	Spectroquant® 1.14879.0001 ^{d)}	Tube test / 25 Aluminium screwcaps / 6 pc.	42 07 56 42 07 57
Benzotriazole	VARIO Triazole Rgt F25	Powder Pack / 100	453 22 00
FAU FAU	no reagents required	-	-
CH ₄ N ₂ O	UREA Reagent 1 UREA Reagent 2 AMMONIA No. 1 AMMONIA No. 2 Combi pack# AMMONIA No.1 / No.2 Combi pack# AMMONIA No.1 / No.2 UREA PRETREAT (compensates for the interference of free Chlorine up to 2 mg/l) UREA Reagent Set, contains: UREA Reagent 1/2, AMMONIA No.1/2, UREA PRETREAT	Liquid reagent / 15 ml Liquid reagent / 10 ml Tablet / 100 Tablet / 100 each 100 each 250 Tablet / 100 Set	45 93 00 45 94 00 451 25 80 BT 451 25 90 BT 451 76 11 BT 451 76 12 BT 51 78 00 BT
Zn	COPPER/ZINC LR EDTA DECHLOR (in case of high levels of residual chlorine)	Tablet / 100 Tablet / 100 Tablet / 100	451 26 20 BT 451 23 90 BT 451 23 50 BT
Zn	KS243 (Zinc Reagent 1) KP244 (Zinc Reagent 2)	Liquid reagent / 65 ml Powder / 20 g Set	56L024365 56L024420 56R023965

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