

Reagents

Development

For more than thirty years, AQUALYTIC® has been manufacturing reagents for water testing and marketing these reagents around the world.

Different forms of reagents are required for different fields of application. It is fair to say that, in terms of quality, tablet reagents are the best form of reagent. Thanks to production techniques of the type used in the pharmaceutical industry and stringent internal quality standards, AQUALYTIC® is able to produce tablet reagents for water testing with a guaranteed shelf life of 5 or 10 years. These tablets are individually sealed in high-grade, polyethylene-coated aluminium foil and represent the reagent form of choice for everyday water testing applications.

Users in different countries traditionally prefer forms of reagent other than tablets. AQUALYTIC® powder reagents are designed to allow fast and easy testing.

Powder reagents are packed in aluminium foil for a wide range of applications and producers represent an alternative reagent form recently introduced by AQUALYTIC®.

Last but not least, liquid reagents are indispensable for many testing tasks. Testing for substances that are hard to detect, for parameters like total nitrogen, or for the aggregate parameter COD, require the use of a wide range of reagents in a form that permits more "aggressive" sample processing. The programme is rounded off by reagent tests and tube tests, making AQUALYTIC® the only reagent producer in the world that offers a complete range of reagent forms.

Tablet reagents

Our test tablets are manufactured in Germany under tightly controlled conditions on the latest machinery.

Maintaining the highest quality standards permits AQUALYTIC® to guarantee our reagent tablets for a minimum of 5 years, and some for as long as 10 years.

We can make this promise because each tablet is hermetically sealed within an individual aluminium foil pocket, protecting against challenging environmental conditions. This packaging keeps each tablet in perfect condition, right up until the time it is needed by the user.

Test tablets remain the most consistent and reliable reagent format available, consistently outperforming other reagent formats, and delivering maximum accuracy for the user.

Now we have improved even further on this highly successful format. To the tight quality control processes, integral to AQUALYTIC® tablet manufacture, and the simple test procedures, we have added new blister packaging.

Our new aluminium foil blister packaging brings added convenience to the tradition of protection achieved in AQUALYTIC® long established tablet production technology.

With the new blister strip, the user just pushes the tablet through the protective foil, straight into the sample. Simple, time-saving and practical.

This type of packaging, long established in pharmaceutical applications, combines all the advantages of protective foil, with convenience for the user.

Each tablet is contained within an individually formed foil cup, lined with the latest aluminium composite material, and guaranteeing product performance.

As a result of improved sealing efficiency, the blister pack has been reduced in size to 91 x 34mm making them even more convenient for storage and shipping.

'BT' is added to the end of the code to identify the new style of packaging. (For example – 4511060BT).

There are no safety risks if the tablets are used in line with the instructions supplied. Safety data sheets are available for all reagents.

Specifications and Certificate of Analysis

To express the high quality standard of AQUALYTIC® tablet reagents, specifications for each type of tablet as well as a "Certificate of Analysis" for each lot is available.



Tube tests

AQUALYTIC® tube tests enable the user to easily perform highly sensitive and precise water testing.

When using tube tests measurement is considerably faster and easier, particularly in the case of standard and serial tests.

The tube tests contain a precisely measured amount of reagent, thereby avoiding the presence of superfluous chemicals and optimising test safety.

Up to six different measuring ranges are available for the various tests.

The tubes are made of special optical glass with a 16 mm in diameter. They are supplied in a storage and dispatch box together with the digestion or auxiliary reagents. This packaging unit contains 24 or 25 reaction vials and up to 2 zero vials for photometer system calibration.

Liquid reagents

As a rule, liquid reagents do not consist of a single preparation but comprise several components that need to be added to the sample in a certain order. As both the size and the number of drops have a decisive effect on the resultant colour complex, the reagents need to be added with a high degree of precision.

The useful life of liquid reagents is reduced by temporary contact with oxygen in the air when the bottle is opened as well as by unsuitable storage environments (presence of sunlight or high temperatures). Provided that the bottles are stored within the temperature range +6°C to +10°C, the AQUALYTIC® DPD and Phenol Red solutions can be used for a period of one year from the production date.

VARIO Powder Packs

The fast and easy use of VARIO Powder Packs has made them extremely popular for water testing applications in many countries throughout the world.

The AQUALYTIC® Powder Pack programme provides more experienced users with a real alternative to existing measurement systems.

The Vario Powder Packs are produced to the same high quality standards that have made AQUALYTIC® tablet reagents so successful for several decades.

Parameters from aluminium and chlorine through to sulphate are just some of the well-known tests that are included in the VARIO Powder Pack range.

Their chemical properties is suitable also for use with Hach-Photometer-Systems.

 Detailed information see pages 52 - 59



Membrane filter set

For use when preparing samples for photometric measurements

Advantages

- removes turbid materials from samples
- differentiates between dissolved and total substances
- 0.45 µm mesh meets the requirements of the official German unitary procedure for water testing

To prevent the effects of light scatter, it must be ensured that all turbid materials are removed from the sample before photometric measurements are carried out. This can be achieved with the AQUALYTIC® membrane filter set. Where certain methods are employed (e.g., iron, manganese, COD, etc.) a membrane filter set must be used to differentiate samples in terms of dissolved and total substances. The filter mesh size of 0.45 µm is in accordance with the official German unitary procedure for water testing.

Order code: 366150

(covers 25 x 0.45 µm membrane filters and two 20 ml syringes)



Reagents

Test	Range	Wave lengths λ / nm					Method	Cuvette
		AL100	AL200	AL400	AL450	AL800		
Alkalinity-M	5 - 200 mg/l	610	610	610	610	615	Acid/Indicator ^{1,2,5}	24 mm \emptyset
Alkalinity-M HR	5 - 500 mg/l	-	-	610	610	615	Acid/Indicator ^{1,2,5}	24 mm \emptyset
Alkalinity-P	5 - 300 mg/l	-	-	560	560	551	Acid/Indicator ^{1,2,5}	24 mm \emptyset
Aluminium VARIO	0.01 - 0.25 mg/l	530	-	530	530	535	Eriochrome cyanine R ²	24 mm \emptyset
Aluminium	0.01 - 0.3 mg/l	530	-	530	530	535	Eriochrome cyanine R ²	24 mm \emptyset
Ammonia	0.02 - 1 mg/l	610	-	610	610	676	Indophenole blue ^{2,3}	24 mm \emptyset
Ammonia VARIO	0.01 - 0.8 mg/l	660	-	660	660	655	Salicylate ²	24 mm \emptyset
Ammonia VARIO LR	0.02 - 2.5 mg/l	-	-	660	660	655	Salicylate ²	16 mm \emptyset
Ammonia VARIO HR	1 - 50 mg/l	-	-	660	660	655	Salicylate ²	16 mm \emptyset
Ammonia, free VARIO (Part of method monochloramine)	0.01 - 0.5 mg/l	660	-	660	660	655	Indophenol	24 mm \emptyset
Arsenic (III, IV) Biguanide (see PHMB)	0.02 - 0.6 mg/l	-	-	-	-	507	Silver diethyldithiocarbamate ¹	20 mm \square

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
CaCO ₃	ALKA-M-PHOTOMETER	Tablet / 100	4513210BT
CaCO ₃	ALKA-M-HR-PHOTOMETER	Tablet / 100	4513240
CaCO ₃	ALKA-P-PHOTOMETER	Tablet / 100	4513230BT
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	535000
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	4515460BT 4515470BT 4517601BT 4517602BT
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 / 100 Tests	4512580BT 4512590BT 4517611BT 4517612BT 460170
N	VARIO Ammonia Salicylate F10 VARIO Ammonia Cyanurate F10	Powder Pack / 100 Powder Pack / 100 Set	535500
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)	535600
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)	535650
N	VARIO Free Ammonia Reagent Solution VARIO Monochlor FRGT	Bottle 5 ml Powder Pack / 100 Set	535800
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-vials® (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 chlorine dioxide / 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-vials® is a Chemetrics Trademark
 # including stirring rod

Reagents

Test	Range	Wave lengths λ / nm					Method	Cuvette
		AL100	AL200	AL400	AL450	AL800		
Boron	0.1 - 2 mg/l	-	-	430	430	450	Azomethine ³	24 mm \emptyset
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	DPD ⁵	24 mm \emptyset 50 mm \square 10 mm \square 24 mm \emptyset
Cadmium (Cd²⁺)	0.025 - 0.75 mg/l	-	-	-	-	525	Cadion	16 mm \emptyset
Chloride	0.5 - 25 mg/l 5 - 250 mg/l ¹⁾	530 530	- -	530 -	530 -	450 -	Silver nitrate/turbidity	24 mm \emptyset
Chloride	5 - 60 mg/l	-	-	-	-	455	Iron (III)-thiocyanate ⁴	24 mm \emptyset
Chloride	0.5 - 20 mg/l	-	-	430	-	-	Mercury thiocyanate / Iron nitrate	24 mm \emptyset
Chlorine ^{a)}	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	DPD ^{1,2}	24 mm \emptyset 50 mm \square 10 mm \square 24 mm \emptyset
Chlorine HR (DPD) ^{a)}	0.1 - 10 mg/l	530	530	530	530	530	DPD ^{1,2}	24 mm \emptyset
Chlorine ^{a)}	0.02 - 4 mg/l 0.02 - 3 mg/l	530	530	530	530	- 510	DPD ^{1,2}	24 mm \emptyset 24 mm \emptyset
Chlorine VARIO ^{a)}	0.02 - 2 mg/l 0.1 - 8 mg/l	530 530	- -	530 530	530 -	510 -	DPD ^{1,2}	24 mm \emptyset 24 mm \emptyset multy via

Material safety data sheets: www.aqualytic.de

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Legend

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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
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	4515790 4515800 4517681 4517682
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	Tablet / 100 Tablet / 100 each 100 each 250 Tablet / 100 Tablet / 100 each 100 each 250 Tablet / 100	4511050BT 4511080BT 4517711BT 4517712BT 4515740BT 4515730BT 4517781BT 451782BT 502691
Cd	Spectroquant® 1.14834.0001 ^{d)}	Tube test / 25	420750
Cl	CHLORIDE T1 CHLORIDE T2 Combi pack# CHLORIDE T1 / T2 Combi pack# CHLORIDE T1 / T2	Tablet / 100 Tablet / 100 each 100 each 250	4515910BT 4515920BT 4517741BT 4517742BT
Cl	Chlorid-51 / Chlorid-52	Reagent test (Liquid reagent) approx. 50-75 Tests	419031
Cl ⁻	KS251 (Chloride Reagent A) KS253 (Chloride Reagent B)	Liquid reagent / 65 ml Liquid reagent / 65 ml	AS-K20251-KW AS-K20253-KW
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	4511050BT 4511080BT 4517711BT 4517712BT 4515740BT 4515730BT 4517781BT 4517782BT
Cl ₂	DPD No. 1 HR DPD No. 3 HR	Tablet / 100 Tablet / 100	4511500BT 4511590BT
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	471010 471020 471030 471056
Cl ₂	VARIO Chlorine FREE-DPD/F10 VARIO Chlorine TOTAL-DPD/F10	Powder Pack / 100 Powder Pack / 100	530100 530120

^{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-vials® (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 chlorine dioxide / 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-vials® is a Chemetrics Trademark

including stirring rod

Reagents

Test	Range	Wave lengths λ / nm					Method	Cuvette
		AL100	AL200	AL400	AL450	AL800		
Chlorine HR (KI)	5 - 200 mg/l	530	-	530	530	470	KI / Acid ⁵	16 mm \emptyset
Chlorine dioxide	0.02 - 11 mg/l 0.05 - 1 ma/l 0.05 - 2.5 mg/l	530 - -	530 - -	530 - -	530 - -	- - - 510 510	DPD/Glycine ^{1,2}	24 mm \emptyset 50 mm \square 24 mm \emptyset
Chlorine dioxide VARIO	0.02 - 3.8 mg/l	530	-	-	-	-	DPD ^{1,2}	
Chromium ^{a) b)}	0.005 - 0.5 mg/l 0.02 - 2 mg/l	- -	- -	- -	- -	542 542	1,5-Diphenylcarbozide ^{1,2}	50 mm \square 16 mm \emptyset
COD LR (ISO 15705:2002)^{b)}	0 - 150 mg/l	430	430	430	430	420	Dichromate / H ₂ SO ₄ ^{1,2}	16 mm \emptyset
COD MR (ISO 15705:2002)^{b)}	0 - 1500 mg/l	610	610	610	610	620	Dichromate / H ₂ SO ₄ ^{1,2}	16 mm \emptyset
COD HR ^{b)}	0 - 15000 mg/l	610	610	610	610	620	Dichromate / H ₂ SO ₄ ^{1,2}	16 mm \emptyset
Copper ^{a)}	0.05 - 5 mg/l 0.05 - 1 mg/l 0.5 - 5 mg/l	560 - -	560 - -	560 - -	560 - -	- 559 559	Biquinoline ⁴	24 mm \emptyset 50 mm \emptyset 24 mm \emptyset
Copper free	0.02 - 1 mg/l	-	-	-	-	-	Zincon ³ / EDTA	24 mm \emptyset
Copper, free VARIO	0.05 - 5 mg/l	560	-	560	560	560	Bicinchoninate	24 mm \emptyset
Cyanide	0.01 - 0.5 mg/l 0.005 - 0.2 mg/l	- -	- -	580 -	580 -	585 585	Pyridine-barbituric acid ¹	24 mm \emptyset 50 mm \square
Cyanuric acid , see Stabilizer								
DEHA	20 - 500 μ g/l	-	-	560	560	562	PPST ³	24 mm \emptyset

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

Display	Reagent	Form of reagent/Quantity	Order code
Cl ₂	ACIDIFYING GP	Tablet / 100	4515480
	CHLORINE HR (KI)	Tablet / 100	4513000
	Combi pack [#] CHLORINE HR (KI)/ACIDIFYING GP	each 100	4517721
	Combi pack [#] CHLORINE HR (KI)/ACIDIFYING GP	each 250	4517722
ClO ₂	DPD No. 1	Tablet / 100	4511050BT
	DPD No. 3	Tablet / 100	4511080BT
	Combi pack [#] DPD No.1 / No.3	each 100	4517711BT
	Combi pack [#] DPD No.1 / No.3	each 250	4517712BT
	GLYCINE ^{f)}	Tablet / 100	4512170BT
	Combi pack [#] DPD No.1 / GLYCINE	each 100	4517731BT
	Combi pack [#] DPD No.1 / GLYCINE	each 250	4517732BT
	DPD No. 1 HIGH CALCIUM ^{e)}	Tablet / 100	4515740BT
	DPD No. 3 HIGH CALCIUM ^{e)}	Tablet / 100	4515730BT
	Combi pack [#] DPD No.1 / No.3 HIGH CALCIUM ^{e)}	each 100	4517781BT
Combi pack [#] DPD No.1 / No.3 HIGH CALCIUM ^{e)}	each 250	4517782BT	
ClO ₂	VARIO Chlorine FREE-DPD/F10	Powder Pack / 100	530100
Cr	PERSULF. RTG FOR CR	Powder Pack / 100	537300
	Chromium Hexavalent	Powder Pack / 100	537310
O ₂	Reaction tube 0-150 mg/l	Tube test / 25	420720
	Reaction tube 0-150 mg/l, mercury free	Tube test / 25	420710
O ₂	Reaction tube 0-1500 mg/l	Tube test / 25	420721
	Reaction tube 0-1500 mg/l, mercury free	Tube test / 25	420711
O ₂	Reaction tube 0-15000 mg/l	Tube test / 25	420722
	Reaction tube 0-15000 mg/l, mercury free	Tube test / 25	420712
Cu	COPPER No. 1	Tablet / 100	4513550BT
	COPPER No. 2	Tablet / 100	4513560BT
	Combi pack [#] COPPER No.1 / No.2	each 100	4517691BT
	Combi pack [#] COPPER No.1 / No.2	each 250	4517692BT
Cu	COPPER/ZINC LR	Tablet / 100	4512620
	EDTA	Tablet / 100	4512390
	DECHLOR (in case of high levels of residual chlorine)	Tablet / 100	4512350
Cu	Vario Cu 1 F10	Powder Pack / 100	530300
CN	Cyanid-11 / Cyanid-12 / Cyanid-13	Reagent test (Powder, Liquid reagent) / 200 Tests	418875
DEHA	DEHA Solution	Liquid reagent / 100 ml	461181
	DEHA	Tablet / 100	4513220

^{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-vials[®] (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 chlorine dioxide / 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-vials[®] is a Chemetrics Trademark

[#] including stirring rod

Reagents

Test	Range	Wave lengths λ / nm					Method	Cuvette
		AL100	AL200	AL400	AL450	AL800		
DEHA VARIO	20 - 500 $\mu\text{g/l}$	-	-	560	560	562	PPST ³	24 mm \emptyset
Fluoride	0.05 - 2 mg/l 0.05 - 1.5 mg/l	580 -	- -	580 -	580 -	- 580	SPADNS ²	24 mm \emptyset
Formaldehyde	1 - 5 mg/l 0.02 - 1 mg/l	- -	- -	- -	- -	585 585	H ₂ SO ₄ / Chromotropic acid	10 mm \square 50 mm \square
Formaldehyde	0.1 - 5 mg/l	-	-	-	-	575	H ₂ SO ₄ / Chromotropic acid	16 mm \emptyset
Hardness, calcium	50 - 900 mg/l	-	-	560	560	-	Murexide ⁴	24 mm \emptyset
Hardness, calcium	0 - 500 mg/l	560	560	560	560	-	Murexide ⁴	24 mm \emptyset
Hardness, total	2 - 50 mg/l 20 - 500 mg/l ^{b)}	560 560	- -	560 560	560 560	571 571	Metallphthalein ³	24 mm \emptyset
Hazen (Pt-Co-units ; APHA)	0 - 500 mg/l 0 - 500 mg/l	430 -	- -	430 -	430 -	- 455	Direct reading ^{1,2}	24 mm \emptyset 50 mm \square
Hydrazine	0.05 - 0.5 mg/l	-	-	430	430	455	Dimethylamino- benzaldehyde ³	24 mm \emptyset
Hydrazine	0.01 - 0.6 mg/l 0.005 - 0.6 mg/l	- -	- -	430 -	430 -	- 455	Dimethylamino- benzaldehyde ³	24 mm \emptyset
Hydrazine^{c)}	0.01 - 0.7 mg/l	-	-	430	430	-	PDMAB	24 mm \emptyset
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 \emptyset 50 mm \square 24 mm \emptyset
Iodine	0.05 - 3.6 mg/l	-	-	530	530	510	DPD ⁵	24 mm \emptyset
Iron (II, III) soluble	0.02 - 1 mg/l 0.01 - 0.5 mg/l 0.1 - 1 mg/l	560 - -	560 - -	560 -	560 -	- 562 562	PPST ³	24 mm \emptyset 50 mm \square 10 mm \square
Iron VARIO (II, III) soluble	0.02 - 3 mg/l 0.1 - 3 mg/l	530 -	- -	530 -	530 -	- 510	1,10-Phenanthroline ²	24 mm \emptyset

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Display	Reagent	Form of reagent/Quantity	Order code
DEHA	VARIO OXYSCAV 1 RGT VARIO DEHA 2 RGT	Powder Pack / 200 Solution / 100 ml Set	536000
F	SPADNS Reagent Fluoride Standard Reagent solution and standard required	Liquid reagent / 250 ml Liquid reagent / 500 ml Solution / 30 ml	4467481 4467482 205630
HCHO	Spectroquant® 1.14678.0001 ^{d)}	Reagent test / ca. 50-75 Tests	420751
HCHO	Spectroquant® 1.14500.0001 ^{d)}	Tube test / 25	420752
CaCO ₃	CALCHECK	Tablet / 100	4515650
CaCO ₃	Combi pack [#] CALCIO H No.1 / No.2 Combi pack [#] CALCIO H No.1 / No.2	each 100 each 250	4517761BT 4517762BT
CaCO ₃	HARDCHECK P	Tablet / 100 Tablet / 250	4515660BT 4515661BT
Pt-Co-units	no reagents required	-	-
N ₂ H ₄	Hydrazine Test Powder Spoon	Powder / 30 g	462910 384930
N ₂ H ₄	VARIO Hydra 2 Rgt Solution	Solution / 100 ml	531200
N ₂ H ₄	Vacu-vial® ^{l)}	Test Kit / 30 Adapter for Vacu-vials® ^{l)}	380470 192075
H ₂ O ₂	HYDROGENPEROXIDE LR	Tablet / 100	4512380BT
I	DPD No. 1	Tablet / 100	4511060BT
Fe	IRON LR IRON (II) LR	Tablet / 100 Tablet / 100	4515370BT 4515420
Fe	VARIO Ferro F10	Powder Pack / 100	530560

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^{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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[#] including stirring rod

Reagents

Test	Range	Wave lengths λ / nm					Method	Cuvette
		AL100	AL200	AL400	AL450	AL800		
Iron VARIO, total ⁹⁾	0.02 - 1.8 mg/l 0.1 - 1.8 mg/l	580 -	- -	580 -	580 -	- 590	TPTZ ⁹⁾	24 mm \emptyset
Iron LR	0.03 - 2.0 mg/l	-	-	580	-	-	Ferrozine / Thioglycolate	24 mm \emptyset
Lead (Pb²⁺)	0.1 - 5 mg/l	-	-	-	-	520	4-(2-Pyridylazo)-resorcin	10 mm \square
Lead (Pb²⁺)	0.1 - 5 mg/l	-	-	-	-	515	4-(2-Pyridylazo)-resorcin	16 mm \emptyset
Manganese	0.2 - 4 mg/l	530	-	530	530	450	Formaloxime	24 mm \emptyset
Manganese VARIO LR	0.01 - 0.7 mg/l	560	-	560	560	558	PAN	24 mm \emptyset
Manganese VARIO HR	0.1 - 18 mg/l	530	-	530	530	525	Periodate oxidation ²	24 mm \emptyset
Molybdate / Molybdenum	1 - 50 mg/l 1 - 30 mg/l 0.6 - 30 mg/l	- - 430	- - -	430 - -	430 - -	- 366 -	Thioglycolate ⁴	24 mm \emptyset
Molybdate / Molybdenum VARIO LR	0.5 - 5 mg/l 0.03 - 3 mg/l	- 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 -	420 -	Mercaptoacetic acid	24 mm \emptyset
Monochloramine VARIO	0.04 - 4.5 mg/l	660	-	660	660	655	Indophenol	24 mm \emptyset
Nickel	0.02 - 1 mg/l 0.2 - 7 mg/l	- -	- -	- -	- -	443 443	Dimethylglyoxime ^{2,3}	50 mm \square 24 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
Fe	VARIO TPTZ F10	Powder Pack / 100	530550
Fe	KS61 (Ferrozine / Thioglycolate) KS63 (Thioglycolate) KT274 (Ammonia / Persulphate) KT135 (Phenolphthalein Indicator) KS144 (Calcium Hardness Puffer)	Liquid reagent / 65 ml Liquid reagent / 65 ml Tablet / 50 Liquid reagent / 65 ml	AS-K20061-KW AS-K20063-KW AS-K20274-KW AS-K20135-KW AS-K20144-KW
Pb	Spectroquant® 1.09717.0001 ^{d)}	Reagent test / 50 Tests	420753
Pb	Spectroquant® 1.14833.0001 ^{d)}	Tube test / 25	420754
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	4516080 4516090 4517621 4517622
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	 535090 530640
Mn	VARIO Manganese Citrate Puffer F10 VARIO Sodiumperiodate F10	Powder Pack / 100 Powder Pack / 100 Set	 535100
MoO ₄	MOLYBDATE No.1 HR MOLYBDATE No.2 HR Combi pack# MOLYBDATE No.1 HR / No.2 HR Combi pack# MOLYBDATE No.1 HR / No.2 HR	Tablet / 100 Tablet / 100 each 100 each 250	4513060 4513070BT 4517631BT 4517632BT
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	 535450
MoO ₄	VARIO Molybdenum HR1 F10 VARIO Molybdenum HR2 F10 VARIO Molybdenum HR3 F10	Powder Pack / 100 Powder Pack / 100 Powder Pack / 100 Set	 535300
Cl ₂	VARIO Monochlor FRGT	Powder Pack / 100	531810
Ni	Nickel-51, Nickel-52	Reagent test (Powder, Liquid reagent) / 50 Tests	419033

^{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-vials® (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 chlorine dioxide / 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-vials® is a Chemetrics Trademark

including stirring rod

Reagents

Test	Range	Wave lengths λ / nm					Method	Cuvette
		AL100	AL200	AL400	AL450	AL800		
Nitrate	0.08 - 1 mg/l	-	-	530	-	-	Zinc reduction / NED	24 mm \emptyset
Nitrate VARIO	1 - 30 mg/l	-	-	430	430	410	Chromotropic acid	16 mm \emptyset
Nitrate	0.5 - 14 mg/l	-	-	-	-	340	2,6-Dimethylphenole ³	16 mm \emptyset
Nitrite	0.01 - 0.5 mg/l	-	-	560	560	545	N-(1-Naphthyl)-ethylenediamine ^{2,3}	24 mm \emptyset
Nitrite	0.03 - 0.6 mg/l 0.3 - 3 mg/l	-	-	-	-	545 545	Sulfanilic/Naphthylamine ¹	16 mm \emptyset
Nitrite LR VARIO	0.01 - 0.3 mg/l	-	-	530	530	507	Diazotation	24 mm \emptyset
Nitrogen-total ^{b)}	0.5 - 14 mg/l 5 - 140 mg/l i)	-	-	-	-	340	2,6-Dimethylphenole 2,3	16 mm \emptyset
Nitrogen VARIO, total LR ^{b)}	0.5 - 25 mg/l	-	-	430	430	410	Persulphate-digestion method	16 mm \emptyset
Nitrogen VARIO, total HR ^{b)}	5 - 150 mg/l	-	-	430	430	410	Persulphate-digestion method	16 mm \emptyset
Oxygen, activ	0.1 - 10 mg/l	-	-	530	530	-	DPD	
Oxygen, dissolved ^{c)}	10 - 800 μ g/l	-	-	530	530	-	Rhodazine D TM	
Ozone	0.02 - 1 mg/l 0.02 - 0.5 mg/l 0.02 - 2 mg/l	-	-	-	-	510 510 -	DPD/Glycine ⁵	24 mm \emptyset 50 mm \square 24 mm \emptyset

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

Display	Reagent	Form of reagent/Quantity	Order code
N	NITRATE TEST Powder NITRATE TEST Tablet NITRITE LR Nitrate test tube	Powder / 15 g Tablet / 100 Tablet / 100	465230 502810 4512310 535580
N	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)	535580
N	Reaction tube, Nitrat-111	Tube test Liquid reagent / 24	420702
N	NITRITE LR	Tablet / 100	4512310
N	Reaction tube, Nitrit-101	Tube test (Powder) / 24	419018
N	VARIO Nitri 3	Powder Pack / 100	530980
N	Digestion reagent, Compensation reagent, Nitrat-111	Tube test (Powder, Liquid reagent) / 24	420703
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)	535550
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)	535560
O ₂	DPD No. 4	Tablet / 100	4511220BT
O ₂	Vacu-vial® ^{d)}	Liquid reagent / 30 Adapter for Vacu-vials® ^{d)}	380450 192075
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	4511060BT 4511080BT 4517711BT 4517712BT 4512170BT 4517731BT 4517732BT

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ⁱ⁾ high range by dilution

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including stirring rod

Reagents

Test	Range	Wave lengths λ / nm					Method	Cuvette
		AL100	AL200	AL400	AL450	AL800		
Phenols	0.1 - 5 mg/l	-	-	-	-	507	4-Aminoantipyrine ¹	24 mm \emptyset
PHMB (Biguanide)	2 - 60 mg/l	-	-	560	560	-	Buffer/Indicator	24 mm \emptyset
Phosphate-total LR ^{b)}	0.07 - 3 mg/l 0.2 - 10 mg/l	-	-	-	-	690 690	Phosphomolybdic acid/ Ascorbic acid ²	16 mm \emptyset
Phosphate-total HR ^{b)}	1.5 - 20 mg/l 5 - 60 mg/l	-	-	-	-	690 690	Phosphomolybdic acid/ Ascorbic acid ²	16 mm \emptyset
Phosphate LR, ortho	0.05 - 4 mg/l	660	-	660	660	710	Phosphomolybdic acid/ Ascorbic acid ²	24 mm \emptyset
Phosphate HR, ortho	1 - 80 mg/l	-	-	430	430	470	Vanadomolybdate ²	24 mm \emptyset
Phosphate VARIO ortho	0.06 - 2.5 mg/l	660	-	660	660	890	Ascorbic acid ²	24 mm \emptyset
Phosphate VARIO ortho	0.06 - 5 mg/l	-	-	660	660	890	Ascorbic acid ²	16 mm \emptyset
Phosphate-ortho	3 - 60 mg/l	-	-	-	-	438	Vanadomolybdate ²	16 mm \emptyset
Phosphate VARIO ^{b)} acid hydrolyzable and total	acid hydrolyzable: 0.02 - 1.6 mg/l 0.06 - 5 mg/l	-	-	660	660	890	Acid digestion Ascorbic acid ²	16 mm \emptyset
	total: 0.02 - 1.1 mg/l 0.06 - 3.5 mg/l	-	-	660	660	890	Acid-/ Persulphate digestion Ascorbic acid ²	16 mm \emptyset
Phosphate VARIO total ^{b)}	0.02 - 1.1 mg/l	-	-	660	660	890	Acid-/ Persulphate digestion Ascorbic acid ²	16 mm \emptyset
	0.06 - 3.5 mg/l	-	-	660	660	890	Ascorbic acid ²	16 mm \emptyset
Phosphate, ortho ^{c)}	5 - 40 mg/l	-	-	430	430	-	Vanadomolybdate ²	
Phosphate, ortho ^{c)}	0.05 - 5 mg/l	-	-	660	660	-	Stannous chloride ²	

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Display	Reagent	Form of reagent/Quantity	Order code
C ₆ H ₅ O _H	PHENOLE No. 1 PHENOLE No. 2	Tablet / 100 Tablet / 100	4515950 4515960
PHMB	PHMB PHOTOMETER	Tablet / 100	4516100BT
P PO ₄	Reaction tube, Phosphat-101, Phosphat- 102, Phosphat-103	Tube test (Powder, Liquid reagent) / 24	419019
P PO ₄	Reaction tube, Phosphat-101, Phosphat-102, Phosphat-103	Tube test (Powder, Liquid reagent) / 24	420700
PO ₄	PHOSPHATE No. 1 LR PHOSPHATE No. 2 LR Combi pack [#] PHOSPHATE No.1 LR / No.2 LR Combi pack [#] PHOSPHATE No.1 LR / No.2 LR	Tablet / 100 Tablet / 100 each 100 each 200	4513040 4513050BT 4517651BT 4517652BT
PO ₄	PHOSPHATE No. 1 HR PHOSPHATE No. 2 HR Combi pack [#] PHOSPHATE No.1 HR / No.2 HR Combi pack [#] PHOSPHATE No.1 HR / No.2 HR	Tablet / 100 Tablet / 100 each 100 each 200	4515810 4515820 4517661 4517662
PO ₄	VARIO PHOS3, F10	Powder Pack / 100	531550
PO ₄	VARIO Dilution Vial VARIO PHOS3, F10 VARIO Deionised Water (for Zero)	50 Tubes Powder Pack / 50 Bottle, 100 ml Set (Tube test)	535200
PO ₄	Reaction tube	Tube test / 24	420701
P PO ₄ P PO ₄	VARIO Acid Reagent Vial VARIO PHOS3, F10 VARIO Deionised Water (for Zero) 1N NaOH 1,54 N NaOH VARIO Potassium Persulfate F10	50 Tubes Powder Pack / 50 Bottle, 100 ml Bottle / 100 ml Bottle / 100 ml Powder Pack / 50 Set (Tube test)	535250
P PO ₄	VARIO Acid Reagent Vial VARIO PHOS3, F10 VARIO Deionised Water (for Zero) 1,54 N NaOH VARIO Potassium Persulfate F10	50 Tubes Powder Pack / 50 Bottle, 100 ml Bottle / 100 ml Powder Pack / 50 Set (Tube test)	535210
PO ₄	Vacu-vial [®] ^{d)}	Test Kit / 30 Adapter for Vacu-vials [®] ^{d)}	380460 192075
PO ₄	Vacu-vial [®] ^{d)}	Test Kit / 30 Adapter for Vacu-vials [®] ^{d)}	380480 192075

^{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-vials[®] (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 chlorine dioxide / 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-vials[®] is a Chemetrics Trademark

[#] including stirring rod

Reagents

Test	Range	Wave lengths λ / nm					Method	Cuvette
		AL100	AL200	AL400	AL450	AL800		
Phosphate HR	5 - 80 mg/l	-	-	430	-	-	Vanadomolybdate ²	24 mm \emptyset
Phosphonate VARIO	0.02 - 125 mg/l	-	-	660	660	660	Persulfate UV-Oxidation	24 mm \emptyset
pH value	5.2 - 6.8	-	-	560	560	-	Bromcresol purple ⁵	24 mm \emptyset
pH value	6.5 - 8.4	560	560	560	560	558	Phenol red ⁵	24 mm \emptyset
pH value	6.5 - 8.4	560	560	560	560	558	Phenol red ⁵	24 mm \emptyset
pH value	8.0 - 9.6	-	-	560	560	-	Thymol blue ⁵	24 mm \emptyset
Polyacrylates	1 - 30 mg/l	-	-	660	-	-	Turbidity	24 mm \emptyset
Potassium	0.7 - 12 mg/l 1 - 10 mg/l	-	-	430	430	-	Tetraphenylborate- Turbidity ⁴	24 mm \emptyset 24 mm \emptyset
Silica	0.05 - 4 mg/l 0.05 - 3 mg/l	660	-	660	660	-	Silicomolybdate ^{2,3}	24 mm \emptyset
Silica VARIO LR	0.1 - 1.6 mg/l	660	-	660	660	815	Heteropolyblue ²	24 mm \emptyset
Silica VARIO HR	1 - 90 mg/l 1 - 100 mg/l	430	-	430	430	-	Silicomolybdate ^{2,3}	24 mm \emptyset 24 mm \emptyset
Sodiumhypochlorite	0.2 - 16 %	-	-	530	530	-	Potassium iodide ⁵	24 mm \emptyset

Material safety data sheets: www.aqualytic.de

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Legend

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Display	Reagent	Form of reagent/Quantity	Order code
PO ₄	KS228 (Ammonia Molybdate)	Liquid reagent / 65 ml	AS-K20228-KW
	KS229 (Ammonia Metavanadate)	Liquid reagent / 65 ml	AS-K20229-KW
	KS278 (50 % Sulfuric Acid)	Liquid reagent / 65 ml	AS-K20278-KW
	KS135 (Phenolphthalein Indicator)	Liquid reagent / 65 ml	AS-K20135-KW
	KS144 (Calcium Hardness Puffer)	Liquid reagent / 65 ml	AS-K20144-KW
	KT274 (Ammonium Persulfate Tablette)	Liquid reagent / 65 ml	AS-K20274-KW
PO ₄	VARIO Potassium Persulfate F10	Powder Pack / 100	535220
	VARIO PHOS3, F10	Powder Pack / 200 Set	
pH	BROMOCRESOLPURPLE/PHOTOMETER	Tablet / 100	4515700
pH	PHENOLRED / PHOTOMETER	Tablet / 100	4511770BT
pH	PHENOLRED Solution	Liquid reagent / 15 ml	471040
pH	THYMOLBLUE / PHOTOMETER	Tablet / 100	4515710
Polyacryl	KS255 (Polyacrylate Reagent 1)	Liquid reagent / 65 ml	AS-K20255-KW
	KS256 (Polyacrylate Reagent 2)	Liquid reagent / 65 ml	AS-K20256-KW
	KS336 (Propan-2-ol)	Liquid reagent / 65 ml	AS-K20336-KW
	C18 (Cartouche)		AS-K22811-KW
	KS173 (2,4 Dinitrophenol)	Liquid reagent / 65 ml	AS-K20173-KW
	KT183 (Nitric Acid)	Liquid reagent / 65 ml	AS-K20183-KW
K	POTASSIUM T	Tablet / 100	4515670
SiO ₂	SILICA No. 1	Tablet / 100	4513130
	SILICA No.2	Tablet / 100	4513140
	Combi pack [#] SILICA No.1 / No.2	each 100	4517671
	Combi pack [#] SILICA No.1 / No.2	each 250	4517672
	SILICA PR (in presence of phosphate)	Tablet / 100	4513150
SiO ₂	VARIO Amino Acid F10	Powder Pack / 100	535690
	VARIO Citric Acid F10	Powder Pack / 100	
	VARIO Molybdate 3 Reagent solution	Liquid reagent / 50 ml Set	
SiO ₂	VARIO Silica HR Molybdate F10	Powder Pack / 100	535700
	VARIO Silica HR Acid Rgt F10	Powder Pack / 100	
	VARIO Silica HR Citric Acid F10	Powder Pack / 100 Set	
NaOCl	ACIDIFYING GP	Tablet / 100	4515480
	CHLORINE HR (KI)	Tablet / 100	4513000
	Combi pack [#] CHLORINE HR (KI)/ACIDIFYING GP	each 100	4517721
	Combi pack [#] CHLORINE HR (KI)/ACIDIFYING GP	each 250	4517722
	Dilution set for sample preparation	1 set	414470

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[#] including stirring rod

Reagents

Test	Range	Wave lengths λ / nm					Method	Cuvette
		AL100	AL200	AL400	AL450	AL800		
Spectral Absorption-coefficient	0 - 50 m ⁻¹	-	-	-	-	436 525 620	Direct reading ¹ ISO 7887:1994	50 mm □
Stabilizer	0 - 160 mg/l ^{b)}	530	530	530	530	530	Melamine	24 mm ø
Sulphate VARIO	5 - 100 mg/l 2 - 100 mg/l	-	-	530	530	- 450	Bariumsulphate Turbidity ²	24 mm ø
Sulphate	5 - 100 mg/l	-	-	610	610	-	Bariumsulphate Turbidity ²	24 mm ø
Sulphide	0.04 - 0.5 mg/l	-	-	660	660	668	DPD/Catalyst ^{3,4}	24 mm ø
Sulphite	0.1 - 5 mg/l 0.1 - 10 mg/l 0.05 - 4 mg/l	-	-	430	430	- 405 405	DTNB	24 mm ø 10 mm o 24 mm ø
Surfactants (anionic)	0.05 - 2 mg/l	-	-	-	-	653	Methylene blue ¹	16 mm ø
Suspended solids	0 - 750 mg/l	660	-	660	660	660	Turbidity/Attenuated Radiation	24 mm ø
TOC ^{b)}	50 - 800 mg/l	-	-	-	-	596	H ₂ SO ₄ / Indicator	16 mm ø
Triazoles	1 - 16 mg/l	-	-	430	-	-	Catalyzed UV Digestion	24 mm ø
Turbidity	5 - 500 0 - 1000	-	-	- 530	- 530	860 -	Attenuated Radiation Method Attenuated Radiation Method	50 mm □ 24 mm ø
Urea	0.1 - 2.5 mg/l 0.2 - 5 mg/l ^{b)} 0.1 - 2 mg/l	-	610 610	610 -	610 -	- - 676	Urease / Indophenol	24 mm ø
Zinc	0.02 - 1 mg/l 0.02 - 0.5 mg/l	-	-	610	610	- 616	Zincon ³ /EDTA	24 mm ø

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Display	Reagent	Form of reagent/Quantity	Order code
-	no reagents required	-	-
Cys	CyA-TEST	Tablet / 100	4511370BT
SO ₄	VARIO Sulpha 4 / F10	Powder Pack / 100	532160
SO ₄	SULFATE T	Tablet / 100	4515450BT
S	SULFIDE No. 1 SULFIDE No. 2	Tablet / 100 Tablet / 100	502930 502940
SO ₃	SULFITE LR	Tablet / 100	4518020
MBAS	Spectroquant® 1.14697.0001d)	Tube test / 25	420755
-	no reagents required	-	-
TOC	Spectroquant® 1.14879.0001d)	Tube test / 25 Aluminium screwcaps / 6 pc.	420756 420757
Benzotriazole	Triazole Reagent		532200
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 (without Urea Reagent 1 and 2, please order seperately)	Liquid reagent / 15 ml Liquid reagent / 10 ml Tablet / 100 Tablet / 100 each 100 each 250	459300 459400 4512580BT 4512590BT 4517611BT 4517612BT
Zn	COPPER/ZINC LR EDTA DECHLOR (in case of high levels of residual chlorine)	Tablet / 100 Tablet / 100 Tablet / 100	4512620BT 4512390BT 4512350

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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-vials® is a Chemetrics Trademark

[#] including stirring rod