

NANOCOLOR® tube tests

Precise rapid tests for photometric water analysis

NANOCOLOR® tube tests for photometric analysis convince by their easy handling and therefore are the first choice for routine, laboratory and process analysis. A maximum in accuracy and precision is granted for the measurement results due to exactly pre-dosed reagents in 16 mm cuvettes and additional reagents. The tests are pre-programmed in MACHEREY-NAGEL photometers and selected automatically via a barcode on the cuvette. This perfect interaction of instruments and tests lets the user experience a high measurement safety, saving time and working cost-efficiently.

Ideally packed

All NANOCOLOR® tube tests are delivered in stable boxes with color coded labels, giving all relevant information about the test at one glance. The boxes provide a perfect protection from sunlight and convenient withdrawal of test tubes and reagents. LOT-specific information are available by scanning of the 2D barcode on the back of the box (see page 162). The colored pictograms in the lid, which are of special value for our customers, provide intuitive instructions on the test procedure also for inexperienced users.

The perfect test for every user

The user's choice of the correct test is the first step towards a successful analysis. MACHEREY-NAGEL offers various test kits with different measurement ranges for all typical parameters relevant in water and waste water analysis. It is recommended to choose a test kit, where the expected and measured measurement value is within the 20–80 % range of the measuring range of the used test. Here, the safety of the measurement result is at its optimum. The operator gets reliable results and safety for the reporting of his results to supervisors and towards authorities.

Good to know



Certificate



Certificates of analysis for NANOCOLOR® tube tests can be downloaded fast and convenient via www.mn-net.com/certificate.

Good to know



Via the 2D barcode on the back of the packages, LOT-specific information can be read easily. For further information about the required NANOCOLOR® App see page 160.



Easy

- Colored pictograms as step-by-step instruction
- Big cuvettes for easy pipetting
- Barcoded cuvettes for automatic test selection

Safe

- Convenient withdrawal of tubes from the box
- No contact with chemicals
- Reactions based on internationally accepted standard methods

Reliable

- Precisely pre-dosed reagents
- Adequate test for every application
- Constant high quality from batch to batch

ISO conform COD tests

MACHEREY-NAGEL offers a complete analytical system with seven tube tests for an ISO conform COD analysis. The ISO 15705 describes the use of tube tests that are suitable for photometric evaluation and is a standardized and internationally accepted method for sewage and waste water analysis. This norm explicitly suggests to use commercial test kits.

Time-saving and reliable analysis of total nitrogen

The sum-parameter total nitrogen is of high relevance in water and waste water analysis. It gives valuable information about the grade of contaminations with e.g. ammonia, nitrite or nitrate. NANOCOLOR[®] total nitrogen tests impress with safe and reproducible results as well as fast and easy handling. Precisely pre-dosed reagents allow the performance of the test in only a few steps. A separate cuvette for every sample decomposition saves time and minimizes errors from cross-contaminations.

Good to know

For further information on NANOCOLOR[®] photometers for the evaluation of NANOCOLOR[®] tube tests see page 12.



NANOCOLOR® tube tests

Ordering information

Test	REF	Measuring range NANOCOLOR® VIS II	Number of tests	Shelf life	Method
■ Aluminum 07 ²⁾	985 098	0.02–0.70 mg/L Al ³⁺	19	1 year	Eriochrome® Cyanine R
■ Ammonium 3	985 003	0.04–2.30 mg/L NH ₄ -N 0.05–3.00 mg/L NH ₄ ⁺	20	1 year	Indophenol
■ Ammonium 10	985 004	0.2–8.0 mg/L NH ₄ -N 0.2–10.0 mg/L NH ₄ ⁺	20	1 year	Indophenol
■ Ammonium 50	985 005	1–40 mg/L NH ₄ -N 1–50 mg/L NH ₄ ⁺	20	1 year	Indophenol
■ Ammonium 100	985 008	4–80 mg/L NH ₄ -N 5–100 mg/L NH ₄ ⁺	20	1 year	Indophenol
■ Ammonium 200	985 006	30–160 mg/L NH ₄ -N 40–200 mg/L NH ₄ ⁺	20	1 year	Indophenol
■ Ammonium 2000	985 002	300–1600 mg/L NH ₄ -N 400–2000 mg/L NH ₄ ⁺	20	1 year	Indophenol
■ AOX 3	985 007	0.1–3.0 mg/L AOX 0.01–0.30 mg/L AOX	20	1 year	Mercury(II)-thiocyanate / Iron(III)-nitrate
■ BOD ₅ (in Winkler bottles)	985 822	2–3000 mg/L O ₂	25–50	2 years	Winkler
■ BOD ₅ -TT	985 825	0.5–3000 mg/L O ₂	22	2 years	Winkler
■ Cadmium 2	985 014	0.05–2.00 mg/L Cd ²⁺	10–19	1 year	Cadion
■ Carbonate hardness 15	985 015	1.25–18.75 °e 0.4–5.4 mmol/L H ⁺	20	1 year	Bromphenol blue
■ Chloride 50	985 021	0.5–50.0 mg/L Cl ⁻	20	1 year	Mercury(II)-thiocyanate / Iron(III)-nitrate
■ Chloride 200	985 019	5–200 mg/L Cl ⁻ 0.10–1.00 g/L Cl ⁻	20	1 year	Mercury(II)-thiocyanate / Iron(III)-nitrate
■ Chlorine / Ozone 2	985 017	0.05–2.50 mg/L Cl ₂ 0.05–2.00 mg/L O ₃	20	1 year	DPD
■ Chlorine dioxide 5	985 018	0.15–5.00 mg/L ClO ₂	20	1 year	DPD
■ Chromate 5	985 024	0.05–2.00 mg/L Cr(VI) 0.1–4.0 mg/L CrO ₄ ²⁻ 0.005–0.500 mg/L Cr(VI) ¹⁾ 0.01–1.00 mg/L CrO ₄ ²⁻¹⁾	20	2 years	Carbazide
■ total Chromium 2	985 059	0.05–2.00 mg/L Cr 0.005–0.500 mg/L Cr ¹⁾	20	2 years	Carbazide
■ COD 40	985 027	2–40 mg/L O ₂	20	1 year (2–8 °C)	Potassium dichromate
■ COD 60	ISO 15705	985 022	20	1 year (2–8 °C)	Potassium dichromate
■ COD 160	ISO 15705	985 026	20	1 year	Potassium dichromate
■ COD 160 Hg-free	963 026	15–160 mg/L O ₂	20	1 year (2–8 °C)	Potassium dichromate
■ COD 300	985 033	50–300 mg/L O ₂	20	1 year	Potassium dichromate
■ COD 600	ISO 15705	985 030	20	1 year	Potassium dichromate
■ COD 1500	ISO 15705	985 029	20	1 year	Potassium dichromate
■ COD 1500 Hg-free	963 029	100–1500 mg/L O ₂	20	1 year	Potassium dichromate
■ COD 4000	985 011	400–4000 mg/L O ₂	20	1 year	Potassium dichromate
■ COD 10000	985 023	1.00–10.00 g/L O ₂	20	1 year	Potassium dichromate
■ COD 15000	ISO 15705	985 028	20	1 year	Potassium dichromate
■ COD 60000	985 012	5.0–60.0 g/L O ₂	20	1 year	Potassium dichromate
■ COD LR 150	ISO 15705	985 036	20	1 year	Potassium dichromate
■ COD HR 1500	ISO 15705	985 038	20	1 year	Potassium dichromate
■ org. Complexing agents 10	985 052	0.5–10.0 mg/L I _{BIC}	10–19	1 year	Bismut xylenol orange
■ Copper 5	985 053	0.10–7.00 mg/L Cu ²⁺	20	2 years	Cuprizone

Photometric tests

On other photometers than the NANOCOLOR® VIS II measurement ranges and wavelengths can be different.

¹⁾ A more sensitive measuring range is possible by using semi-micro cuvettes 50 mm (REF 919 50).

²⁾ Decomposition only possible in microwave.

³⁾ Special filter can be necessary for filter photometers.

⁴⁾ Without barcode.

⁵⁾ Please see the instruction leaflet.

⁶⁾ This test can be performed without a NANOCOLOR® reagent set. Determination only with NANOCOLOR® spectrophotometers and the PF-12^{FRS}.

GHS: Globally harmonized system: This product contains harmful substances which must be specially labeled as hazardous. For detailed information please see the SDS.

NANOCOLOR® tube tests

	Spectrophotometer	500 D	PF-12 ^{plus}	PF-3 COD	PF-3 Drinking Water	PF-3 Fish	PF-3 Pool	PF-3 Soil	NanOx N	NanOx Metal	Crack set	Sea water ³⁾	GHS	Test
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		Aluminum 07 ²⁾
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ammonium 3
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ammonium 10
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ammonium 50
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ammonium 100
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ammonium 200
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ammonium 2000
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	AOX 3
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	BOD ₅ (in Winkler bottles)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	BOD ₅ -TT
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		Cadmium 2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>		Carbonat hardness 15
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											<input checked="" type="checkbox"/>	Chloride 50
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>		Chloride 200
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>		Chlorine / Ozone 2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>		Chlorine dioxide 5
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		Chromate 5
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											<input checked="" type="checkbox"/>	total Chromium 2
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 40
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 60
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 160
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												COD 160 Hg-free
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												COD 300
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 600
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 1500
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 1500 Hg-free
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 4000
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 10000
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 15000
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD 60000
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD LR 150
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											COD HR 1500
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										<input checked="" type="checkbox"/>		org. Complexing agents 10
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		Copper 5

NANOCOLOR[®] tube tests

Test	REF	Measuring range NANOCOLOR [®] VIS II	Number of tests	Shelf life	Method	
■ Cyanide 08	985 031	0.02–0.80 mg/L CN ⁻ 0.005–0.100 mg/L CN ⁻¹)	20	1 year	Barbituric acid / Pyridine	
■ DEHA 1 (Diethylhydroxylamine)	985 035	0.05–1.00 mg/L DEHA	20	1 year	Redox reaction	
■ Ethanol 1000	985 838	0.10–1.00 g/L EtOH	0.013–0.130 Vol. % EtOH	23	2 years (< 0 °C)	Alcoholoxidase / Peroxidase
■ Fluoride 2	985 040	0.1–2.0 mg/L F ⁻	20	1.5 years	Lanthanum-Alizarine complexon	
■ Formaldehyde 8	985 041	0.1–8.0 mg/L HCHO	20	2 years	Chromotropic acid	
■ Formaldehyde 10 ³⁾	985 046	0.20–10.00 mg/L HCHO 0.02–1.00 mg/L HCHO ¹⁾	20	2 years	Acetylacetone	
■ Hardness Ca/ Mg	985 044	1.25–25.00 °e 0.2–3.6 mmol/L	5–50 mg/L Mg ²⁺ 10–100 mg/L Ca ²⁺	20	1.5 years	Phthalein purple
■ Hardness 20	985 043	1.25–25.00 °e 0.2–3.6 mmol/L	5–50 mg/L Mg ²⁺ 10–100 mg/L Ca ²⁺	20	1.5 years	Phthalein purple
■ HC 300 (Hydrocarbons)	985 057	0.5–5.6 mg/L HC	30–300 mg/kg HC	20	1 year	Potassium dichromate
■ Iron 3	985 037	0.10–3.00 mg/L Fe 0.02–1.00 mg/L Fe ¹⁾	20	1 year	Diphenylpyridyltriazine	
■ Lead 5	985 009	0.10–5.00 mg/L Pb ²⁺	20	1 year	4-(2-Pyridyl)-(2-azo)-resorcine (PAR)	
■ Manganese 10	985 058	0.1–10.0 mg/L Mn 0.02–2.00 mg/L Mn ¹⁾	20	1.5 years	Formaldoxime	
■ Methanol 15	985 859	0.2–15.0 mg/L MeOH	23	1 year (< 0 °C)	Alcoholoxidase / Peroxidase	
■ Molybdenum 40	985 056	1.0–40.0 mg/L Mo(VI)	1.6–65.0 mg/L MoO ₄ ²⁻	20	2 years	Thioglycolic acid
■ Nickel 4	985 071	0.10–7.00 mg/L Ni ²⁺ 0.02–1.00 mg/L Ni ^{2+ 1)}	20	2 years	Dimethylglyoxime	
■ Nitrate 8	985 065	0.30–8.00 mg/L NO ₃ -N	1.3–35.0 mg/L NO ₃ ⁻	20	2 years	2,6-Dimethylphenol
■ Nitrate 50	985 064	0.3–22.0 mg/L NO ₃ -N	2–100 mg/L NO ₃ ⁻	20	2 years	2,6-Dimethylphenol
■ Nitrate 250	985 066	4–60 mg/L NO ₃ -N	20–250 mg/L NO ₃ ⁻	20	2 years	2,6-Dimethylphenol
■ Nitrite 2	985 068	0.003–0.460 mg/L NO ₂ -N	0.02–1.50 mg/L NO ₂ ⁻	20	1 year	Sulfanilic acid / 1-Naphthylamine
■ Nitrite 4	985 069	0.1–4.0 mg/L NO ₂ -N	0.3–13.0 mg/L NO ₂ ⁻	20	1.5 years	Sulfanilic acid / 1-Naphthylamine
■ total Nitrogen TN _b 22	985 083	0.5–22.0 mg/L N	20	1 year	2,6-Dimethylphenol	
■ total Nitrogen TN _b 60	985 092	3–60 mg/L N	20	1 year	2,6-Dimethylphenol	
■ total Nitrogen TN _b 220	985 088	5–220 mg/L N	20	1 year	2,6-Dimethylphenol	
■ Organic acids 3000	985 050	30–3000 mg/L CH ₃ COOH	0.5–50.0 mmol/L CH ₃ COOH	20	1.5 years	Ethylenglycole / Iron(III)-Ions
■ Oxygen 12	985 082	0.5–12.0 mg/L O ₂	22	2 years	Winkler	
■ Peroxide 2	985 871	0.03–2.00 mg/L H ₂ O ₂	10–19	1 year (2–8 °C)	Peroxidase	
■ pH 6.5–8.2 ⁴⁾	918 72	pH 6.5–8.2	100	1.5 years	Phenol red	
■ Phenolic Index 5	985 074	0.2–5.0 mg/L Phenol	20	1.5 years	4-Aminoantipyrine	
■ ortho- and total Phosphate 1	985 076	0.05–1.50 mg/L P 0.010–0.800 mg/L P ¹⁾	0.2–5.0 mg/L PO ₄ ³⁻ 0.03–2.50 mg/L PO ₄ ^{3- 1)}	20	1 year	Phosphomolybdenum blue

On other photometers than the NANOCOLOR[®] VIS II measurement ranges and wavelengths can be different.

¹⁾ A more sensitive measuring range is possible by using semi-micro cuvettes 50 mm (REF 919 50).

²⁾ Decomposition only possible in microwave.

³⁾ Special filter can be necessary for filter photometers.

⁴⁾ Without barcode.

⁵⁾ Please see the instruction leaflet.

⁶⁾ This test can be performed without a NANOCOLOR[®] reagent set. Determination only with NANOCOLOR[®] spectrophotometers and the PF-12^{Plus}.

GHS: Globally harmonized system: This product contains harmful substances which must be specially labeled as hazardous. For detailed information please see the SDS.

NANOCOLOR® tube tests

	Spectrophotometer	500 D	PF-12 ^{20/5}	PF-3 COD	PF-3 Drinking Water	PF-3 Fish	PF-3 Pool	PF-3 Soil	NanoOx N	NanoOx Metal	Crack set	Sea water ⁵⁾	GHS	Test
	■	■	■									■	■	Cyanide 08
	■	■	■									■	■	DEHA 1 (Diethylhydroxylamine)
	■	■	■										■	Ethanol 1000
	■	■	■									■	■	Fluoride 2
	■	■	■										■	Formaldehyde 8
	■	■	■									■		Formaldehyde 10 ³⁾
	■		■									■		Hardness Ca / Mg
	■	■	■									■		Hardness 20
	■	■	■									■	■	HC 300 (Hydrocarbons)
	■	■	■						■	■	■	■	■	Iron 3
	■	■	■								■			Lead 5
	■	■	■									■	■	Manganese 10
	■	■	■										■	Methanol 15
	■	■	■										■	Molybdenum 40
	■	■	■						■	■	■	■	■	Nickel 4
	■	■	■										■	Nitrate 8
	■	■	■				■						■	Nitrate 50
	■	■	■										■	Nitrate 250
	■	■	■									■	■	Nitrite 2
	■	■	■									■		Nitrite 4
	■	■	■						■				■	total Nitrogen TN _b 22
	■	■	■						■				■	total Nitrogen TN _b 60
	■	■	■						■				■	total Nitrogen TN _b 220
	■	■	■									■	■	Organic acids 3000
	■	■	■									■	■	Oxygen 12
	■	■	■									■		Peroxide 2
	■	■	■		■	■						■		pH 6.5–8.2 ⁴⁾
	■	■	■									■	■	Phenolic index 5
	■	■	■						■			■	■	ortho- and total Phosphate 1

NANOCOLOR® tube tests

Test	REF	Measuring range NANOCOLOR® VIS II		Number of tests	Shelf life	Method
■ ortho- and total Phosphate 5	985 081	0.20–5.00 mg/L P	0.5–15.0 mg/L PO ₄ ³⁻	20	1 year	Phosphomolybdenum blue
■ ortho- and total Phosphate 15	985 080	0.30–15.00 mg/L P	1.0–45.0 mg/L PO ₄ ³⁻	20	1 year	Phosphomolybdenum blue
■ ortho- and total Phosphate 45	985 055	5.0–50.0 mg/L P	15–150 mg/L PO ₄ ³⁻	20	1 year	Phosphomolybdenum blue
■ ortho- and total Phosphate 50	985 079	10.0–50.0 mg/L P	30–150 mg/L PO ₄ ³⁻	19	3 years	Vanadate molybdate
■ ortho- and total Phosphate LR 1	985 095	0.05–0.50 mg/L P	0.2–1.5 mg/L PO ₄ ³⁻	20	1 year	Phosphomolybdenum blue
■ POC 200	985 070	20–200 mg/L POC	2–40 mg/L KWI	20	1.5 years	Turbidity
■ Potassium 50	985 045	2–50 mg/L K ⁺		20	2 years	Potassium tetraphenylborate (Turbidity)
■ Residual hardness 1	985 084	0.03–1.25 °e	0.004–0.180 mmol/L	20	1 year	Phthalein purple
■ Silver 3	985 049	0.20–3.00 mg/L Ag ⁺	0.08–0.50 mg/L Ag ⁺ ¹⁾	20	1.5 years	Indicator
■ Starch 100	985 085	5–100 mg/L starch		19	1 year	Iodine-starch reaction
■ Sulfate 200	985 086	10–200 mg/L SO ₄ ²⁻		20	3 years	Bariumsulfate (Turbidity)
■ Sulfate 1000	985 087	200–1000 mg/L SO ₄ ²⁻		20	3 years	Bariumsulfate (Turbidity)
■ Sulfate LR 200	985 062	20–200 mg/L SO ₄ ²⁻		20	3 years	Bariumsulfate (Turbidity)
■ Sulfide 3	985 073	0.05–3.00 mg/L S ²⁻		20	3 years	Methylene blue
■ Sulfite 10	985 089	0.2–10.0 mg/L SO ₃ ²⁻	0.05–2.40 mg/L SO ₃ ²⁻ ¹⁾	20	1 year	Thiobenzoic acid derivative
■ Sulfite 100	985 090	5–100 mg/L SO ₃ ²⁻		19	1 year	Potassium iodate / -iodide
■ Anionic surfactants 4	985 032	0.20–4.00 mg/L MBAS	0.20–3.500 mg/L SDS	20	2 years	Methylene blue
■ Cationic surfactants 4	985 034	0.20–4.00 mg/L CTAB		20	2 years	Disulfine blue
■ Nonionic surfactants 15	985 047	0.3–15.0 mg/L Triton® X-100		20	2 years	TBPE
■ Thiocyanate 50	985 091	0.5–50.0 mg/L SCN ⁻		20	2 years	Iron(III)-thiocyanate
■ Tin 3 ³⁾	985 097	0.10–3.00 mg/L Sn		18	1 year	9-Phenyl-3-fluoron
■ TOC 25	985 093	2.0–25.0 mg/L C		10	1 year	Indicator
■ TOC 30	985 075	2.0–30.0 mg/L C		20	1 year (2–8 °C)	Indicator
■ TOC 60	985 094	10–60 mg/L C		10	1 year	Indicator
■ TOC 300	985 078	20–300 mg/L C		20	1 year (2–8 °C)	Indicator
■ TOC 600	985 099	40–600 mg/L C		10	1 year	Indicator
■ TTC / Sludge activity	985 890	5–150 µg TPF	0.050–2.300 A	20	2 years (2–8 °C)	2,3,5-Triphenyltetrazoliumchloride (TTC)
■ Turbidity ⁶⁾	Test 9-06	0.1–1000 NTU		–	–	Turbidity
■ Zinc 4	985 096	0.10–4.00 mg/L Zn ²⁺		20	1 year	Zincon
■ Zirconium 100	985 001	5–100 mg/L Zr		20	3 years	Indicator

On other photometers than the NANOCOLOR® VIS II measurement ranges and wavelengths can be different.

¹⁾ A more sensitive measuring range is possible by using semi-micro cuvettes 50 mm (REF 919 50).

²⁾ Decomposition only possible in microwave.

³⁾ Special filter can be necessary for filter photometers.

⁴⁾ Without barcode.

⁵⁾ Please see the instruction leaflet.

⁶⁾ This test can be performed without a NANOCOLOR® reagent set. Determination only with NANOCOLOR® spectrophotometers and the PF-12^{Plus}.

GHS: Globally harmonized system: This product contains harmful substances which must be specially labeled as hazardous. For detailed information please see the SDS.

NANOCOLOR® tube tests

	Spectrophotometer	500 D	PF-12 ^{20/5}	PF-3 COD	PF-3 Drinking Water	PF-3 Fish	PF-3 Pool	PF-3 Soil	NanoOx-N	NanoOx-Metal	Crack set	Sea water ⁵⁾	GHS	Test
■	■	■					■		■			■	■	ortho- and total Phosphate 5
■	■	■					■		■			■	■	ortho- and total Phosphate 15
■	■	■							■			■	■	ortho- and total Phosphate 45
■	■	■							■			■	■	ortho- and total Phosphate 50
■	■	■							■			■	■	ortho- and total Phosphate LR 1
■	■	■										■		POC 200
■	■	■					■					■	■	Potassium 50
■	■	■												Residual hardness 1
■	■	■							■					Silver 3
■	■	■										■	■	Starch 100
■	■	■											■	Sulfate 200
■	■	■											■	Sulfate 1000
■	■	■											■	Sulfate LR 200
■	■	■										■	■	Sulfide 3
■	■	■										■	■	Sulfite 10
■	■	■										■	■	Sulfite 100
■	■	■										■	■	Anionic surfactants 4
■	■	■										■	■	Cationic surfactants 4
■	■	■											■	Nonionic surfactants 15
■	■	■										■	■	Thiocyanate 50
■	■	■										■	■	Tin 3 ³⁾
■	■	■											■	TOC 25
■	■	■											■	TOC 30
■	■	■											■	TOC 60
■	■	■											■	TOC 300
■	■	■											■	TOC 600
■	■	■											■	TTC / Sludge activity
■		■										■		Turbidity ⁶⁾
■	■	■							■	■	■	■	■	Zinc 4
■	■	■							■	■	■	■	■	Zirconium 100