

## MQuant® Liquid

Colorimetric and titrimetric tests

# Brilliant colors, brilliant results

## What is the phosphate content of your water?

### Detecting phosphate in water samples from different sources

#### The Application

Phosphate levels in water are often regulated and must be kept within established limits for both environmental and safety concerns. From measuring phosphate in environmental water to prevent eutrophication, to measuring phosphate added to drinking water as a part of corrosion control, there many reasons phosphate monitoring may be an important part of your water analysis.

#### Our Solution: MQuant® liquid tests for phosphate with color comparators

The MQuant® liquid phosphate tests are designed for sensitive, fast analysis of a range of water sample types. For drinking water, groundwater, freshwater, mineral water, process water, or even seawater, there is an MQuant® liquid test available which can perform the appropriate testing. These tests include a color comparator, allowing you to judge the sample reaction color against a high-quality color scale for accurate evaluation. They are also available for a wide range of phosphate concentrations to meet your specific needs.

#### Benefits

- Easy-to-use visual tests with fast results
- Unique brilliance and fine color graduation for precise analysis
- Excellent sensitivity from very low (ppb range) to medium concentrations
- Traceable to primary reference materials from NIST and PTB
- Shelf life of up to 3 years at 15-25 °C



## MQuant® Liquid

Colorimetric and titrimetric test kits

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**Water Workflow**  
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# MQuant® Liquid

## Colorimetric and titrimetric tests

### High to medium concentrations, especially for turbid solutions

#### MQuant® liquid tests with disk comparator

These tests evaluate the color reaction based on transmitted light, so even turbid and slightly colored water samples can be analyzed without further preparation. The ten-tier color disk is made of durable plastic that will not fade with light exposure, and is suitable for industrial areas and wet environments. Almost all vessels are break-proof for safer handling.

#### Application areas:

- Wastewater
- Industrial water
- Groundwater
- Bottled water
- Boiler water
- Swimming pool water
- Industrial applications



All reagents and the disk comparator are included in the MQuant® liquid test with disk comparator

### Medium concentrations

#### MQuant® liquid tests - titrimetric

The sample is titrated until its color changes. The number of drops consumed to the turning point is counted, or the scale value is read from a pipette to determine the concentration of the tested parameter.

#### MQuant® liquid tests - colorimetric

Reagents are added to the sample, resulting in a colored reaction product. The concentration is determined by assigning the color to a value on a reference scale.

#### Application areas:

- Aquaculture for freshwater and seawater
- Surface water
- Swimming pool water
- Classroom demonstrations



## quality assurance

We check and calibrate our tests using certified buffer solutions which can be traced directly to primary reference materials from NIST and PTB

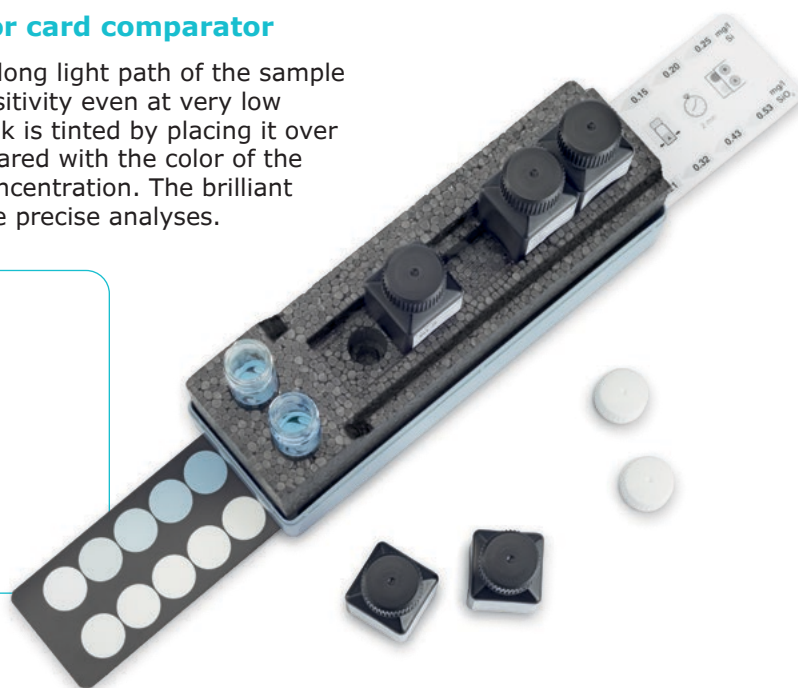
### Very low to medium concentrations

#### MQuant® liquid tests with color card comparator

The build of the comparator and the long light path of the sample tubes ensure high measurement sensitivity even at very low (ppb range) concentrations. The blank is tinted by placing it over the color card so that it can be compared with the color of the reaction product to determine the concentration. The brilliant print and fine color gradation enable precise analyses.

#### Application areas:

- Drinking water
- Bottled water
- Boiler water
- Cooling water
- Industrial applications



MQuant® liquid test with color card comparator offer unparalleled reliability!

#### Accessories for MQuant® Liquid

Product	Cat. No.
Flat-bottomed long tubes with screw caps for MQuant® tests with color card comparator	1.14901.0001
Flat-bottomed tubes with screw caps for titrimetric and colorimetric MQuant® tests	1.14902.0001
Flat-bottomed tubes with screw caps for MQuant® tests with color disk comparator	1.17988.0001
Test vessels with 5-ml and 10-ml graduation for MQuant® tests	1.17989.0001

# MQuant® Liquid

## Colorimetric and titrimetric tests

## MQuant® Compact Laboratory for Water Testing

This compact laboratory allows you to quickly measure all major parameters of standing or flowing surface water, and accurately assess the current water quality. The convenient carrying case provides everything you need in order to measure ammonium, carbonate hardness (acid-binding capacity), nitrate, nitrite, oxygen and oxygen consumption (biological oxygen demand after n days; BODn), total and residual hardness, pH, and temperature. The portability of the MQuant® Compact Laboratory is ideal for on-site environmental testing of ground- and surface water.

### Kit content | Cat. No. 1.11151.0001

Parameter	Measuring range	No. of tests	Cat. No. Refill pack
MQuant® Ammonium Test	0.2 – 5 mg/L NH <sub>4</sub>	50	1.08024.0001
MQuant® Carbonate Hardness Test / Acid cap. to pH 4.3 (ANC)	0.25 – 25 °e ANC: 0.1 – 7.2 mmol/L	150 at 12.5 °e	1.08048.0001
MQuant® Total Hardness Test	0,2 - 20 °d (10 - 360 mg/l CaCO <sub>3</sub> )	150 at 12.5 °e	1.08039.0001
MQuant® Nitrate Test	10 – 150 mg/L NO <sub>2</sub>	100	1.11170.0001
MQuant® Nitrite Test	0.025 – 0.5 mg/L NO <sub>2</sub>	200	1.08025.0001
MQuant® pH Test	pH 4.5 – 9	200	1.08027.0001
MQuant® Phosphate Test in freshwater and seawater	0.25 – 3.0 mg/L PO <sub>4</sub>	100	1.14661.0001
MQuant® Oxygen Test	0,1-10 mg/l O <sub>2</sub>	100 at 8.5 mg/L O <sub>2</sub>	1.11107.0001
Flat-bottomed tubes including screw caps for MQuant® Tests		3 pcs	Part of kit

All necessary accessories such as vessels, color cards and a thermometer are included in the case solution



**Economical  
refill packs**

**Easy, fast,  
and direct  
readout of  
color cards**

## Is the ammonium level of your water sample safe for aquatic life?

**Sensitive measurement of ammonium in freshwater and seawater**

### **The Application**

Ammonium is a common water pollutant and can be toxic to aquatic life. Measuring ammonium in water is required by many international authorities, and levels must be kept within maximum limits.

### **Our Solution: MQuant® Ammonium Test | Cat. No. 1.14657.0001**

We offer test kits for fast, reliable measurement of ammonium ions and unionized ammonium in fresh- or seawater. Kits are designed for use with the MQuant® liquid system, and have measurement sensitivity in the range of 0.5–10 mg/L  $\text{NH}_4$ .

### **Benefits**

- Easy-to-use with illustrated instructions
- Color card included in test kit for precise comparison
- Fast reaction times: get results within 10 minutes
- Waste disposal advice available



# MQuant® Liquid

## Colorimetric and titrimetric tests

### MQuant® Liquid Test Parameter

	Parameter	Graduation	No. of tests	Cat. No.	Cat. No. Refill pack	Method	Type
<b>A</b>	Alkalinity Test	0.1 mmol/L	200 at 8.5 mmol/L	1.11109.0001		Acidimetric	Titration with pipette
	Aluminium Test	0.07–0.12–0.20–0.35–0.50–0.65–0.80 mg/L Al	185	1.14413.0001	1.18452.0002	Chromazurol S	Color-card comparator
	Aluminium Test	0.10–0.20–0.35–0.50–0.75–1–2–3–6 mg/L Al	150	1.18386.0001	1.18452.0002	Chromazurol S	Disk comparator
	Ammonium Test	0.025–0.050–0.075–0.10–0.15–0.20–0.25–0.30–0.40 mg/L NH <sub>4</sub>	70	1.14428.0002		Indophenol blue	Color-card comparator
	Ammonium Test	0.05–0.10–0.15–0.2–0.3–0.4–0.5–0.6–0.8 mg/L NH <sub>4</sub>	100	1.14400.0001		Neßler	Color-card comparator
	Ammonium Test	0.2–0.4–0.6–1–2–3–5 mg/L NH <sub>4</sub>	50	1.08024.0001		Indophenol blue	Sliding comparator
	Ammonium Test	0.2–0.5–0.8–1.2–1.6–2–3–5–8 mg/L NH <sub>4</sub>	200	1.14423.0002		Indophenol blue	Color-card comparator
	Ammonium Test	0.2–0.5–0.8–1.3–2.0–3.0–4.5–6.0–8.0 mg/L NH <sub>4</sub>	200	1.14750.0002		Indophenol blue	Disk comparator
	Ammonium Test	0.5–1–3–5–10 mg/L NH <sub>4</sub>	150	1.11117.0001		Neßler	Color-card comparator
	Ammonium Test in freshwater and seawater	0.5–1–3–5–10 mg/L NH <sub>4</sub>	50	1.14657.0001		Indophenol blue	Color-card
<b>C</b>	Calcium Test	2 mg/L Ca	200 at 170 mg/L Ca	1.11110.0001		Titriplex® III	Titration with pipette
	Carbon Dioxide Test	1.25 mg/L CO <sub>2</sub> 2.5 mg/L CO <sub>2</sub> 5 mg/L CO <sub>2</sub>	100 at 30 mg/L 100 at 60 mg/L 100 at 120 mg/L	1.17179.0001		Phenolphthalein	Titration with dropping bottle
	Carbonate Hardness Test/ Acid cap. to pH 4.3 (ANC)	0.25 °e and 0.1 mmol/L	300 at 12.5 °e	1.08048.0001		Acidimetric	Titration with pipette
	Carbonate Hardness Test in freshwater and seawater	1.25 °e	50 at 1.25 °e	1.14653.0001		Acidimetric	Titration with dropping bottle
	Chloride Test	2 mg/L Cl	200 at 170 mg/L Cl	1.11106.0001		Mercury(II)-nitrate	Titration with pipette
	Chloride Test	3–6–10–18–30–60–100–180–300 mg/L Cl	200	1.14753.0001	1.18322.0002	Mercury(II)-thiocyanate	Disk comparator
	Chloride Test	5–10–20–40–75–150–300 mg/L Cl	400	1.14401.0001	1.18322.0002	Mercury(II)-thiocyanate	Color-card comparator
	Chloride Test	25 mg/L Cl	100 at 150 mg/L Cl	1.11132.0001		Mercury(II)-nitrate	Titration with dropping bottle
	Chlorine Test (free chlorine)	0.01–0.025–0.045–0.06–0.08–0.1–0.15–0.2–0.3 mg/L Cl <sub>2</sub>	400 free chlorine	1.14434.0001	1.14977.0002	DPD	Color-card comparator
	Chlorine Test (free chlorine) in freshwater and seawater	0.10–0.25–0.5–1.0–2.0 mg/L Cl <sub>2</sub>	100 free chlorine	1.14670.0001		TMB	Color-card
Chlorine Test (free chlorine)	0.1–0.2–0.3–0.4–0.6–0.8–1.0–1.5–2.0 mg/L Cl <sub>2</sub>	600 free chlorine	1.14978.0001	1.14979.0002	DPD Liquid	Disk comparator	

	Beer processing	Food testing	Juices	Milk products	Mineral water	Soft drinks	Aquaculture	Boiler water, cooling water	Drinking water	Ground-water, surface water	Industrial water	Process water	Seawater	Swimming pools	Wastewater	Agriculture	Disinfection control	Electro-plating	
	Food & Beverages						Water									Others			
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# MQuant® Liquid

## Colorimetric and titrimetric tests

### MQuant® Liquid Test Parameter

	Parameter	Graduation	No. of tests	Cat. No.	Cat. No. Refill pack	Method	Type
<b>C</b>	Chlorine Test (free and total chlorine)	0.1–0.2–0.3–0.4–0.6–0.8–1.0–1.5–2.0 mg/L Cl <sub>2</sub>	400 free chlorine + 400 total chlorine	1.14801.0001	1.14803.0002	DPD Liquid	Disk comparator
	Chlorine Test (free chlorine)	0.25–0.50–0.75–1–2–4–8–10–15 mg/L Cl <sub>2</sub>	1,000 free chlorine	1.14976.0001	1.14977.0002	DPD	Disk comparator
	Chlorine Test (free and total chlorine)	0.25–0.50–0.75–1–2–4–7–10–15 mg/L Cl <sub>2</sub>	400 free chlorine + 400 total chlorine	1.14826.0001	1.18326.0002	DPD	Disk comparator
	Chlorine- and pH Test (free chlorine)	0.10–0.20–0.30–0.60–1.0–1.5 mg/L Cl <sub>2</sub> / pH 6.5–6.8–7.0–7.2–7.4–7.6–7.9	150 (chlorine) 150 (pH)	1.11160.0001		DPD Phenol red	Sliding comparator
	Chlorine- and pH Test (free and total chlorine)	0.1–0.3–0.6–1.0–1.5 mg/L Cl <sub>2</sub> pH 6.8–7.1–7.4–7.6–7.8	200 (chlorine) 200 (pH)	1.11174.0001	1.11157.0001 1.11143.0001	DPD Phenol red	Color-matching vessel
	Chlorine Dioxide Test	0.020–0.050–0.075–0.10–0.15–0.20–0.30–0.40–0.55 mg/L ClO <sub>2</sub>	300	1.18754.0001		DPD	Color-card comparator
	Chromate Test	0.011–0.022–0.045–0.07–0.09–0.11–0.13–0.18–0.22 mg/L CrO <sub>4</sub>	150	1.14402.0001		Diphenyl-carbazide	Color-card comparator
	Chromate Test	0.22–0.45–0.67–1.0–1.3–1.8–2.2–2.9–3.6 mg/L CrO <sub>4</sub>	300	1.14441.0001		Diphenyl-carbazide	Color-card comparator
	Chromate Test	0.22–0.45–0.8–1.3–2.2–4.0–6.7–13–22 mg/L CrO <sub>4</sub>	300	1.14756.0001		Diphenyl-carbazide	Disk comparator
	Copper Test	0.05–0.08–0.12–0.16–0.2–0.25–0.3–0.4–0.5 mg/L Cu	125	1.14414.0001	1.18459.0002	Cuprizone	Color-card comparator
	Copper Test in freshwater and seawater	0.15–0.3–0.45–0.6–0.8–1.2–1.6 mg/L Cu	50	1.14651.0001		Cuprizone	Color-card
	Copper Test	0.3–0.6–1.0–1.5–2.0–2.5–3–5 mg/L Cu	125	1.14418.0001	1.18459.0002	Cuprizone	Color-card comparator
	Copper Test	0.3–0.6–1.0–1.5–2–3–5–7–10 mg/L Cu	125	1.14765.0001	1.18459.0003	Cuprizone	Disk comparator
	Cyanide Test	0.002–0.004–0.007–0.010–0.013–0.016–0.020–0.025–0.030 mg/L CN	65	1.14417.0001	1.18457.0002	König reaction	Color-card comparator
	Cyanide Test	0.03–0.06–0.10–0.15–0.2–0.3–0.4–0.5–0.7 mg/L CN	200	1.14429.0001	1.18457.0002	König reaction	Color-card comparator
Cyanide Test	0.03–0.07–0.13–0.2–0.3–0.5–1–2–5 mg/L CN	200	1.14798.0001	1.18457.0002	König reaction	Disk comparator	
<b>F</b>	Fluoride Test	0.15–0.3–0.5–0.8 mg/L F	100	1.18771.0001		Alizarin complexone	Color-card
	Formaldehyde Test	0.10–0.25–0.4–0.6–0.8–1.0–1.5 mg/L HCHO	100	1.08028.0001		Triazole derivative	Sliding comparator
<b>H</b>	Hydrazine Test	0.10–0.25–0.5–1.0 mg/L N <sub>2</sub> H <sub>2</sub>	100	1.08017.0001	necessary 1.08018.0001	Dimethylamino-benzaldehyde	Color-matching vessel

	Beer processing	Food testing	Juices	Milk products	Mineral water	Soft drinks	Aquaculture	Boiler water, cooling water	Drinking water	Ground-water, surface water	Industrial water	Process water	Seawater	Swimming pools	Wastewater	Agriculture	Disinfection control	Electro-plating	
	Food & Beverages						Water									Others			
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# MQuant® Liquid

## Colorimetric and titrimetric tests

### MQuant® Liquid Test Parameter

	Parameter	Graduation	No. of tests	Cat. No.	Cat. No. Refill pack	Method	Type
<b>I</b>	Iron Test	0.01–0.02–0.03–0.04–0.06–0.08–0.10–0.15–0.20 mg/L Fe	300	1.14403.0001	1.18458.0002	Triazine	Color-card comparator
	Iron Test in freshwater and seawater	0.05–0.1–0.2–0.4–0.6–0.8–1.0 mg/L Fe	50	1.14660.0001		Triazine	Color-card
	Iron Test	0.1–0.2–0.5–0.8–1.2–2–3–5 mg/L Fe	500	1.14759.0001	1.18458.0002	Triazine	Disk comparator
	Iron Test	0.1–0.3–0.5–1.0–2.5–5.0–7.5–12.5–25–50 mg/L Fe	200	1.11136.0001	1.08023.0001	2,2'-Bipyridine	Color-matching vessel
	Iron Test	0.2–0.4–0.6–0.8–1.0–1.3–1.6–2.0–2.5 mg/L Fe	500	1.14438.0001	1.18458.0002	Triazine	Color-card comparator
	Iron Test	0.25–0.5–1.0–2.0–3.0–5.0–7.5–10–15 mg/L Fe	300	1.14404.0001		1,10-phenanthroline	Color-card comparator
<b>M</b>	Magnesium Test	100–200–300–500–1,000–1,500 mg/L Mg	50	1.11131.0001		Xylidyl blue	Color-card
	Manganese Test	0.03–0.06–0.10–0.15–0.20–0.25–0.3–0.4–0.5 mg/L Mn	120	1.14406.0001	1.18460.0002	Oxime	Color-card comparator
	Manganese Test	0.3–0.7–1.3–2–3–4–5–7–10 mg/L Mn	120	1.14768.0001	1.18460.0002	Oxime	Disk comparator
<b>N</b>	Nickel Test	0.02–0.04–0.07–0.10–0.15–0.2–0.3–0.4–0.5 mg/L Ni	125	1.14420.0001	1.18461.0002	Dimethylglyoxime	Color-card comparator
	Nickel Test	0.5–1.0–1.5–2–3–4–6–8–10 mg/L Ni	500	1.14783.0001	1.18461.0002	Dimethylglyoxime	Disk comparator
	Nitrate Test	5–10–20–30–40–50–60–70–90 mg/L NO <sub>3</sub>	90	1.18387.0001		Nitrospectral / sulfuric acid	Disk comparator
	Nitrate Test	10–25–50–75–100–125–150 mg/L NO <sub>3</sub>	200	1.11170.0001		Sulfanilic acid	Sliding comparator
	Nitrate Test in freshwater	10–25–50–75–100–125–150 mg/L NO <sub>3</sub>	100	1.11169.0001		Sulfanilic acid	Color-card
	Nitrite Test	0.005–0.012–0.02–0.03–0.04–0.05–0.06–0.08–0.10 mg/L NO <sub>2</sub>	110	1.14408.0001	1.18463.0002	Griess' reaction	Color-card comparator
	Nitrite Test in freshwater and seawater	0.05–0.15–0.25–0.50–1.0 mg/L NO <sub>2</sub>	100	1.14658.0001		Griess' reaction	Color-card
	Nitrite Test	0.025–0.05–0.075–0.1–0.15–0.2–0.3–0.5 mg/L NO <sub>2</sub>	200	1.08025.0001		Griess' reaction	Sliding comparator
	Nitrite Test	0.1–0.2–0.3–0.4–0.6–0.8–1.0–1.3–2.0 mg/L NO <sub>2</sub>	400	1.14424.0001	1.18463.0002	Griess' reaction	Color-card comparator
	Nitrite Test	0.1–0.2–0.4–0.6–1.0–1.8–3.0–6.0–10 mg/L NO <sub>2</sub>	400	1.14774.0001	1.18463.0002	Griess' reaction	Disk comparator
<b>O</b>	Oxygen Test	0.1 mg/L O <sub>2</sub>	100 at 8.5 mg/L O <sub>2</sub>	1.11107.0001	1.11152.0001 1.14663.0001	modified Winkler method	Titration with pipette
	Oxygen Test in freshwater and seawater	1–3–5–7–9–12 mg/L O <sub>2</sub>	50	1.14662.0001	necessary: 1.14663.0001	modified Winkler method	Color-card
	Ozone Test	0.007–0.017–0.030–0.040–0.055–0.070–0.10–0.14–0.20 mg/L O <sub>3</sub>	300	1.18755.0001		DPD	Color-card comparator
	Ozone Test	0.15–0.35–0.5–0.7–1.4–2.7–5.0–7.0–10 mg/L O <sub>3</sub>	300	1.18758.0001		DPD	Disk comparator

	Beer processing	Food testing	Juices	Milk products	Mineral water	Soft drinks	Aquaculture	Boiler water, cooling water	Drinking water	Ground-water, surface water	Industrial water	Process water	Seawater	Swimming pools	Wastewater	Agriculture	Disinfection control	Electro-plating	
	Food & Beverages						Water									Others			
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# MQuant® Liquid

## Colorimetric and titrimetric tests

### MQuant® Liquid Test Parameter

	Parameter	Graduation	No. of tests	Cat. No.	Cat. No. Refill pack	Method	Type
<b>P</b>	pH Universal indicator, liquid	pH 4.0–4.5–5.0–5.5–6.0–6.5–7.0–7.5–8.0–8.5–9.0–9.5–10.0	100 mL	1.09175.0100		Mixed indicator	Color-card
	pH Universal indicator, liquid	pH 4.0–4.5–5.0–5.5–6.0–6.5–7.0–7.5–8.0–8.5–9.0–9.5–10.0	1 L	1.09175.1000		Mixed indicator	Color-card
	pH Indicator liquid	pH 9.0–10.0–11.0–12.0–13.0	100 mL	1.09176.0100		Mixed indicator	Color-card
	pH Test	pH 4.5–5.0–5.5–6.0–6.5–7.0–7.5–8.0–8.5–9.0	400	1.08027.0001		Mixed indicator	Sliding comparator
	Phosphate Test	0.046–0.092–0.14–0.18–0.25–0.34–0.43 mg/L PO <sub>4</sub>	200	1.18394.0001	1.18465.0002	Phosphomolybdenum blue	Color-card comparator
	Phosphate Test in freshwater and seawater	0.25–0.50–0.75–1.0–1.5–2.0–3.0 mg/L PO <sub>4</sub>	100	1.14661.0001		Phosphomolybdenum blue	Color-card
	Phosphate Test	0.6–1.2–1.8–2.5–3.1–4.6–6.1–7.7–9.2 mg/L PO <sub>4</sub>	200	1.14846.0001	1.18465.0002	Phosphomolybdenum blue	Disk comparator
	Phosphate Test	1.3–3.3–6.7–10–13 mg/L PO <sub>4</sub>	200	1.11138.0001	1.08046.0001	Phosphomolybdenum blue	Color-matching vessel
	Phosphate Test	3.1–6.1–11–18–31–61–123 mg/L PO <sub>4</sub>	190	1.14449.0001	1.18466.0002	Vanadium molybdate	Color-card comparator
	Phosphate Test	4.6–9.2–18–28–37–49–61–123–307 mg/L PO <sub>4</sub>	300	1.18388.0001	1.18466.0002	Vanadium molybdate	Disk comparator
<b>R</b>	Residual Hardness Test	0.05–0.10–0.19 °e	400	1.11142.0001		Mixed indicator	Color-card
<b>S</b>	Silicate (Silicic Acid) Test	0.021–0.043–0.086–0.13–0.17–0.21–0.32–0.43–0.53 mg/L SiO <sub>2</sub>	150	1.14410.0001	1.18323.0002	Silico-molybdenum blue	Color-card comparator
	Silicate (Silicic Acid) Test	0.64–1.3–2.1–3.2–4.3–6.4–11–15–21 mg/L SiO <sub>2</sub>	150	1.14792.0001	1.18323.0002	Silico-molybdenum blue	Disk comparator
	Sulfate Test	25–50–75–100–130–160–190–240–300 mg/L SO <sub>4</sub>	75	1.18389.0001		Tannic acid	Disk comparator
	Sulfate Test	25–50–80–110–140–200–300 mg/L SO <sub>4</sub>	90	1.14411.0001		Tannic acid	Color-card comparator
	Sulfide Test	0.02–0.04–0.06–0.08–0.10–0.13–0.16–0.20–0.25 mg/L S	100	1.14416.0001		Dimethyl-p-phenyldiamine	Color-card comparator
	Sulfide Test	0.1–0.3–0.5–0.7–1–2–3–4–5 mg/L S	200	1.14777.0001		Dimethyl-p-phenyldiamine	Disk comparator
	Sulfite Test	0.5 mg/L Na <sub>2</sub> SO <sub>3</sub> (0.32 mg/L SO <sub>3</sub> )	200 at 40 mg/L Na <sub>2</sub> SO <sub>3</sub>	1.11148.0001		Iodate / Starch	Titration with pipette
<b>T</b>	Total Hardness Test	0.13 °e and 1 mg/L CaCO <sub>3</sub>	300 at 3.8 °e	1.08047.0001	1.08040.0001	Titriplex® III	Titration with pipette
	Total Hardness Test	0.25 °e and 10 mg/L CaCO <sub>3</sub>	300 at 12.5 °e	1.08039.0001	1.08033.0001 1.11122.0001 1.08203.0001	Titriplex® III	Titration with pipette
	Total Hardness Test	1.25 °e	100 at 12.5 °e	1.11104.0001		Titriplex® III	Titration with dropping bottle
	Total Hardness Test	20 mg/L CaCO <sub>3</sub>	200 at 200 mg/L	1.08312.0001		Titriplex® III	Titration with dropping bottle
	Total Hardness Test in freshwater	1.25 °e	50 at 1.25 °e	1.14652.0001		Titriplex® III	Titration with dropping bottle
<b>Z</b>	Zinc Test	0.1–0.2–0.3–0.4–0.5–0.7–1–2–5 mg/L Zn	120	1.14780.0001	1.14782.0002	Thiocyanate / Brilliant green	Disk comparator
	Zinc Test	0.1–0.2–0.3–0.4–0.5–0.7–1–2–5 mg/L Zn	120	1.14412.0001	1.14782.0002	Thiocyanate / Brilliant green	Color-card comparator

	Beer processing	Food testing	Juices	Milk products	Mineral water	Soft drinks	Aquaculture	Boiler water, cooling water	Drinking water	Ground-water, surface water	Industrial water	Process water	Seawater	Swimming pools	Wastewater	Agriculture	Disinfection control	Electro-plating
	Food & Beverages						Water									Others		
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