Rapid Tests

MACHEREY-NAGEL

Dip & Read Tests
for more than 40 substances

Accurate · Rapid · Easy

- pH indicators
- Semi-quantitative tests
- Qualitative tests

MACHEREY-NAGEL

Welcome

MACHEREY-NAGEL is a privately owned company that was founded in 1911. We follow long term strategies to supply our customers with the best solutions for special analytics. Our distributors and their customers can be sure, that our current products will remain available and that we will add additional value in the future.

We commit ourselves to the outstanding quality of our products. To ensure this, all our rapid tests are developed and produced in Düren, Germany. Since more than 10 years we are certified according to EN ISO 9001 and 13485. This is not only an expression of our commitment to quality but also the basis for manufacturing and distribution of rapid tests for in-vitro diagnostic and other medical applications. Users in the field realize that their results will have the same quality whenever they test.

For optimal support of our customers, a team of professionals in analytical chemistry serves all areas, from R&D to Production and Sales & Marketing. Distributors and their customers appreciate our competence and flexibility.

Test papers and test strips

Our test papers and test strips allow the identification or semi-quantitative determination of more than 40 different substances. Professional analysts as well as chemical laymen appreciate these tests because they are

Easy. For the user, most of the tests are simply “Dip & Read” although they use complicated chemical systems.

Rapid. Whenever immediate results are asked for, test papers or test strips are the ideal choice. These tests are especially useful for on-site analysis.

Accurate. High quality color charts on the semi-quantitative tests ensure optimal results.

OEM, private label and special presentations

The majority of the test papers and test strips that leave our production carry a brand other than MACHEREY-NAGEL.

Private label presentations are appreciated by our partners because they increase the awareness for their businesses. Our professional in-house design group creates private label artwork that meets and often exceeds the highest expectations. This ensures the consistent high quality of the finished goods and makes creating your own brand as easy as 1-2-3.

Special presentations are mainly used for promotional purposes. Individually sealed test strips are the ideal choice for mailings, journals or as giveaways to support product promotions. Almost all test strips and pH-indicators can be provided single sealed.

OEM products are manufactured for many different markets. Our partners have detailed knowledge about the demands for their specific markets. They know what products can be successful. Based on a close cooperation we convert their ideas with our underlying technology and capability into optimal products. Together, we develop innovative products, that often find a “non-compete” market. Thus, OEM-products developed and manufactured by MACHEREY-NAGEL are highly successful.

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pH-Fix

Unmatched pH test strips

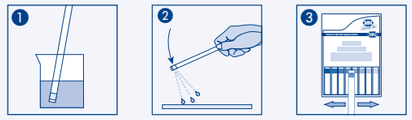
For many years untrained users as well as analytical professionals appreciate the experience of easy pH testing with pH-Fix. In contrast to common indicator papers, the indicator dyes in pH-Fix test strips are chemically bound to the test pads. This patented technology prevents bleeding of the dyes and therefore a contamination of the sample, even in highly alkaline solutions. The fixation enables the strips to remain in solution over extended periods of time allowing a safe pH determination even in weakly buffered solutions.

Good to know

Many customers receive our pH-Fix test strips as an OEM product.

How it's done

Using pH-Fix test strips



Dip in | Shake off | Read result

Optimized packages

In the classic packaging, the smart corner of the box safely prevents jamming of test strips. By simply tilting the box the strips fall easily into the smart corner allowing the closing with maximal comfort.

How it's done

The smart corner

Remove strip | Hold box diagonally | Close easily

Especially users in the medical sector appreciate the robust PlopTop tube. The tube is higher than the length of the strips and can be easily opened and closed with the thumb of the holding hand. There is no risk of jamming the strip. The tube is virtually unbreakable and stands firmly on any flat surface.

CE-mark for medical applications

pH-Fix 4.5–10.0 PT (REF 92121) is tested and approved for the medical application in gastric juice and is CE-certified according to IVDR 2017/746 for professional use. It meets the special demands of health care processionals and ensure safe results for medical pH testing.

Automatic evaluation with the QUANTOFIX® Relax

The strip reader QUANTOFIX® Relax (see page 24) allows the easy and reliable documentation of pH testing. The system provides objective and quantitative results. It allows printing and storing of test data including time and sample ID. Test strips covering the complete pH range can be evaluated using the QUANTOFIX® Relax (for details please see table on page 6).

pH-Fix

Rapid

- Dip & Read
- Results in seconds
- Always ready for use

Easy

- No calibration
- No maintenance
- No accessories

Reliable

- Long handle for sufficient hand-sample-distance
- Brilliant color chart for precise readings
- Automatic evaluation with QUANTOFIX® Relax for safe documentation

Good to know

Many pH-Fix test strips can be also evaluated on the strip reader QUANTOFIX® Realx (see page 24)

Ordering information

Test	REF	Measuring range (visual)	Measuring range (instrumental) [1]	Number of tests	Shelf life	QUANTOFIX® Relax	Classic flat box	PlopTop tube	Test
■ 0–14	92110	0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11 · 12 · 13 · 14	1–13	100	4 years	■	■		0–14
■ 0.0–6.0	92115	0 · 0.5 · 1.0 · 1.5 · 2.0 · 2.5 · 3.0 · 3.5 · 4.0 · 4.5 · 5.0 · 5.5 · 6.0	0.5–6.0	100	4 years	■	■		0.0–6.0
■ 2.0–9.0	92118	2.0 · 2.5 · 3.0 · 3.5 · 4.0 · 4.5 · 5.0 · 5.5 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0	2.0–9.0	100	4 years	■	■		2.0–9.0
■ 4.5–10.0	92120	4.5 · 5.0 · 5.5 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0 · 9.5 · 10.0	4.5–10.0	100	4 years	■	■		4.5–10.0
■ 6.0–10.0	92122	6.0 · 6.4 · 6.7 · 7.0 · 7.3 · 7.6 · 7.9 · 8.2 · 8.4 · 8.6 · 8.8 · 9.1 · 9.5 · 10.0	6.0–10.0	100	4 years	■	■		6.0–10.0
■ 7.0–14.0	92125	7.0 · 7.5 · 8.0 · 8.5 · 9.0 · 9.5 · 10.0 · 10.5 · 11.0 · 11.5 · 12.0 · 12.5 · 13.0 · 13.5 · 14.0	7.0–13.5	100	4 years	■	■		7.0–14.0
■ 0.3–2.3	92180	0.3 · 0.7 · 1.0 · 1.3 · 1.6 · 1.9 · 2.3	–	100	4 years		■		0.3–2.3
■ 1.7–3.8	92190	1.7 · 2.0 · 2.3 · 2.6 · 2.9 · 3.2 · 3.5 · 3.8	–	100	4 years		■		1.7–3.8
■ 3.1–8.3	92135	3.1 · 3.5 · 3.9 · 4.3 · 4.7 · 5.1 · 5.5 · 5.9 · 6.3 · 6.7 · 7.1 · 7.5 · 7.9 · 8.3	–	100	4 years		■		3.1–8.3
■ 3.6–6.1	92130	3.6 · 4.1 · 4.4 · 4.7 · 5.0 · 5.3 · 5.6 · 6.1	3.6–6.1	100	4 years	■	■		3.6–6.1
■ 4.0–7.0	92137	4.0 · 4.4 · 4.7 · 5.0 · 5.3 · 5.5 · 5.8 · 6.1 · 6.5 · 7.0	–	100	4 years		■		4.0–7.0
■ 5.1–7.2	92140	5.1 · 5.4 · 5.7 · 6.0 · 6.3 · 6.6 · 6.9 · 7.2	–	100	4 years		■		5.1–7.2
■ 6.0–7.7	92150	6.0 · 6.4 · 6.7 · 7.0 · 7.3 · 7.7	6.0–7.7	100	4 years	■	■		6.0–7.7
■ 7.5–9.5	92160	7.5 · 7.9 · 8.2 · 8.4 · 8.6 · 8.8 · 9.1 · 9.5	–	100	4 years		■		7.5–9.5
■ 7.9–9.8	92170	7.9 · 8.3 · 8.6 · 8.9 · 9.1 · 9.4 · 9.8	–	100	4 years		■		7.9–9.8
■ 0–14 PT	92111	0 · 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11 · 12 · 13 · 14	1–13	100	4 years	■		■	0–14 PT
■ 4.5–10.0 PT[2]	92121	4.5 · 5.0 · 5.5 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0 · 9.5 · 10.0	4.5–10.0	100	4 years	■		■	4.5–10.0 PT

[1] Together with QUANTOFIX® Relax, the test strips may not be used for any medical application.
[2] CE-certified according to IVDR 2017/746, for professional use.

QUANTOFIX® Relax
Reflectometer for evaluation of test strips

Perfect optic – Exact results

- Intuitive operation
- Highest precision
- Reproducible results independently from the user
- Printout of the results for optimal documentation

PEHANON®

pH determination in colored samples

PEHANON® test strips unify pH indicator and reference color chart on one strip. Any sample color has the same effect on both, the reference colors and the reactive pad, allowing unadulterated pH reading even in colored solutions.

Safe testing of hazardous samples

An invisible hydrophobic barrier just above the top color field prevents migration of the sample. The handle remains dry and clean and the user is safely protected from contamination due to capillary rise.

No separate color chart needed

PEHANON® test strips can be read without a separate color chart. Workers in production can use single strips instead of complete packs making the product very economical.

Ordering information

Test	REF	Measuring range	Number of Tests	Shelf life
pH 1–12	90401	1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11 · 12	200	3 years
pH 0–1.8	90411	0 · 0.3 · 0.6 · 0.8 · 1.0 · 1.2 · 1.5 · 1.8	200	3 years
pH 1.0–2.8	90412	1.0 · 1.3 · 1.6 · 1.8 · 2.0 · 2.2 · 2.5 · 2.8	200	3 years
pH 1.8–3.8	90413	1.8 · 2.1 · 2.4 · 2.7 · 3.0 · 3.2 · 3.5 · 3.8	200	3 years
pH 2.8–4.6	90414	2.8 · 3.1 · 3.4 · 3.6 · 3.8 · 4.0 · 4.3 · 4.6	200	3 years
pH 3.8–5.5	90415	3.8 · 4.0 · 4.2 · 4.4 · 4.6 · 4.9 · 5.2 · 5.5	200	3 years
pH 4.0–9.0	90424	4.0 · 4.5 · 5.0 · 5.5 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0	200	3 years
pH 5.2–6.8	90416	5.2 · 5.5 · 5.7 · 5.9 · 6.1 · 6.3 · 6.5 · 6.8	200	3 years
pH 6.0–8.1	90417	6.0 · 6.3 · 6.6 · 6.9 · 7.2 · 7.5 · 7.8 · 8.1	200	3 years
pH 7.2–8.8	90419	7.2 · 7.4 · 7.6 · 7.8 · 8.0 · 8.2 · 8.5 · 8.8	200	3 years
pH 8.0–9.7	90420	8.0 · 8.2 · 8.4 · 8.6 · 8.8 · 9.1 · 9.4 · 9.7	200	3 years
pH 9.5–12.0	90421	9.5 · 10.0 · 10.5 · 11.0 · 11.5 · 12.0	200	3 years
pH 10.5–13.0	90422	10.5 · 11.0 · 11.5 · 12.0 · 12.5 · 13.0	200	3 years
pH 12.0–14.0	90423	12.0 · 12.5 · 13.0 · 13.5 · 14.0	200	3 years

Universal- and indicator papers

pH indicator papers - standard for many applications

pH indicator papers have been available for decades and are the standard for many applications. For each pH value these papers show a single color which can be matched with the color scale at intervals of 0.2–1 pH units. The indicator papers come in plastic reels that ensure long-term stability and protection against many external influences. They will be always ready-to-use when needed.

MACHEREY-NAGEL also controls the production of the raw papers which ensures – in combination with our ISO 9001 QC system – the high quality of the indicator papers.

The colors of the scales are specially mixed to perfectly match the reaction color of the indicator papers. This makes the reading of results easy and accurate.

Good to know

We produce pH indicator booklets for pharmaceutical industries with a CE-marking for urine diagnostics.

Ordering information

Test	REF	REF refill	Measuring range	Presentation	Shelf life
pH 1–11	90201	90202	1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11	Reel of 5 m length and 7 mm width	3 years
pH 1–11	90203	–	1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11	Booklet with 100 strips 10 x 70 mm	3 years
pH 1–14	90204	90224	1 · 2 · 3 · 5 · 6 · 7 · 8 · 9 · 10 · 12 · 14	Reel of 5 m length and 7 mm width	3 years
pH 0.5–5.5	90205	90225	0.5 · 1.0 · 1.5 · 2.0 · 2.5 · 3.0 · 3.5 · 4.0 · 4.5 · 5.0 · 5.5	Reel of 5 m length and 7 mm width	3 years
pH 3.8–5.8	90206	90226	< 3.8 · 3.8 · 4.1 · 4.3 · 4.5 · 4.7 · 4.9 · 5.2 · 5.5 · 5.8 · > 5.8	Reel of 5 m length and 7 mm width	3 years
pH 4.0–7.0	90207	90227	4.0 · 4.3 · 4.6 · 4.9 · 5.2 · 5.5 · 5.8 · 6.1 · 6.4 · 6.7 · 7.0	Reel of 5 m length and 7 mm width	3 years
pH 5.4–7.0	90208	90228	< 5.4 · 5.4 · 5.7 · 6.0 · 6.2 · 6.4 · 6.7 · 7.0 · > 7.0	Reel of 5 m length and 7 mm width	3 years
pH 5.5–9.0	90209	90229	5.5 · 6.0 · 6.5 · 7.0 · 7.5 · 8.0 · 8.5 · 9.0	Reel of 5 m length and 7 mm width	3 years
pH 6.4–8.0	90210	90230	< 6.4 · 6.4 · 6.6 · 6.8 · 7.0 · 7.2 · 7.4 · 7.6 · 7.8 · 8.0 · > 8.0	Reel of 5 m length and 7 mm width	3 years
pH 7.2–9.7	90211	90231	< 7.2 · 7.2 · 7.5 · 7.8 · 8.1 · 8.4 · 8.7 · 9.0 · 9.3 · 9.7 · > 9.7	Reel of 5 m length and 7 mm width	3 years
pH 8.0–10.0	90212	90232	8.0 · 8.2 · 8.4 · 8.7 · 9.0 · 9.2 · 9.6 · 10.0	Reel of 5 m length and 7 mm width	3 years
pH 9.0–13.0	90213	90233	9.0 · 9.5 · 10.0 · 10.5 · 11.0 · 11.5 · 12.0 · 12.5 · 13.0	Reel of 5 m length and 7 mm width	3 years
pH 12.0–14.0	90214	90234	12.0 · 12.5 · 13.0 · 13.5 · 14.0	Reel of 5 m length and 7 mm width	3 years

refill: Refill pack

Duotest and Tritest

pH papers with multiple indicator zones

By the combination of several indicators on one test paper, a better recognition between different pH values is achieved. This makes the correct pH reading easier.

Duotest – two indicator zones for higher accuracy

Duotest indicator papers combine two different indicator zones on a single strip. The zones are separated by a hydrophobic barrier, which effectively prevents mixing of the reaction colors and increases the mechanical stability.

Tritest – three indicator zones for highest precision

Tritest indicator paper has three different indicator zones on a single paper. The three zones guarantee optimal color differences and safe determination of in-between values. Tritest indicator paper is available for a pH range from 1–11 and feature 1 pH unit increments.

In Tritest L indicator paper, two hydrophobic barriers separate the indicator zones. Even in strongly alkaline solutions, the colors of the zones do not mix.

Ordering information

Duotest

Test	REF	REF refill	Measuring range	Presentation	Shelf life
■ pH 1–12	90301	90311	1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11 · 12	Reel of 5 m length and 10 mm width	3 years
■ pH 1.0–4.3	90302	90312	1.0 · 1.3 · 1.6 · 1.9 · 2.2 · 2.5 · 2.8 · 3.1 · 3.4 · 3.7 · 4.0 · 4.3	Reel of 5 m length and 10 mm width	3 years
■ pH 3.5–6.8	90303	90313	3.5 · 3.8 · 4.1 · 4.4 · 4.7 · 5.0 · 5.3 · 5.6 · 5.9 · 6.2 · 6.5 · 6.8	Reel of 5 m length and 10 mm width	3 years
■ pH 5.0–8.0	90304	90314	5.0 · 5.3 · 5.6 · 5.9 · 6.2 · 6.5 · 6.8 · 7.1 · 7.4 · 7.7 · 8.0	Reel of 5 m length and 10 mm width	3 years
■ pH 7.0–10.0	90305	90315	7.0 · 7.3 · 7.6 · 7.9 · 8.2 · 8.5 · 8.8 · 9.1 · 9.4 · 9.7 · 10.0	Reel of 5 m length and 10 mm width	3 years
■ pH 9.5–14.0	90306	90316	9.5 · 10.0 · 10.5 · 11.0 · 11.5 · 12.0 · 12.5 · 13.0 · 13.5 · 14.0	Reel of 5 m length and 10 mm width	3 years
■ pH-Set D10	90319	–	–	Box with 10 reels of Duotest	3 years

refill: Refill pack

Tritest

Test	REF	REF refill	Measuring range	Presentation	Shelf life
■ pH 1–11	90501	90502	1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11	Reel of 5 m length and 10 mm width	3 years
■ L pH 1–11	90510	90511	1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11	Reel of 6 m length and 14 mm width	3 years

refill: Refill pack

Other pH indicators

pH papers without color chart and indicator solutions

For some specific analytical questions, qualitative pH papers or indicator solutions are used.

Simplest acid / base determination

Qualitative pH papers without color chart are simple, completely impregnated indicator papers. They indicate if the pH of a solution is above or below the transition point (color change) and are useful to distinguish between acids and bases.

pH determinations in weakly buffered solutions

UNISOL indicator solutions are used for pH determination in pure water, in surface waters and in very dilute acids or bases. An indicator solution is added to the sample and the reaction color is compared with a color scale. Therefore, they allow the easy and reliable pH determination in weakly buffered solutions.

Ordering information

pH papers without color scale

Test	REF	REF refill	Color change / pH	Presentation	Shelf life	GHS
■ Brilliant yellow paper	90701	–	yellow → red / 6.7–7.9	Box of 200 strips 20 x 70 mm	3 years	
■ Congo paper MN 260 HE	90705	–	red → blue / 5.0–3.0	Box of 200 strips 20 x 70 mm	3 years	■
■ Litmus paper blue	91106	91116	blue → red / 8.0–5.0	Reel of 5 m length and 7 mm width	3 years	
■ Litmus paper blue	91126	–	blue → red / 8.0–5.0	Booklet of 100 strips 10 x 70 mm	3 years	
■ Litmus paper neutral	91107	91117	red → violet-blue / 5.0–8.0	Reel of 5 m length and 7 mm width	3 years	
■ Litmus paper neutral	91127	–	red → violet-blue / 5.0–8.0	Booklet of 100 strips 10 x 70 mm	3 years	
■ Litmus paper red	91108	91118	red → blue / 5.0–8.0	Reel of 5 m length and 7 mm width	3 years	
■ Litmus paper red	91128	–	red → blue / 5.0–8.0	Booklet of 100 strips 10 x 70 mm	3 years	
■ Nitrazine yellow paper	90711	–	yellow → blue-violet / 6.0–7.0	Box of 200 strips 20 x 70 mm	3 years	
■ Phenolphthalein paper	90712	90713	white → red / 8.3–10.0	Reel of 5 m length and 7 mm width	3 years	

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

UNISOL

Test	REF	Measuring range	Presentation	Shelf life	GHS
■ 410, pH 4–10	91002	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 bottle of 100 mL, color chart + cuvette	3 years	■
■ 113, pH 1–13	91031	1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9 · 10 · 11 · 12 · 13	1 bottle of 100 mL, color chart + cuvette	3 years	■
■ Plastic cuvettes MN 13/72	91039	–	Pack of 5 rectangular cuvettes	–	

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

QUANTOFIX®

Semi-quantitative test strips

QUANTOFIX® test strips meet all requirements of a modern rapid test. The color of the reactive pad changes depending on the concentration of an analyte in the sample. The evaluation is usually carried out visually by a comparison of the reaction color with a multi-stage color scale.

Easy analysis directly at the point of interest

Analytical professionals as well as occasional testers appreciate QUANTOFIX® test strips for the fast and easy analysis directly at the point of interest. Often, these tests are used to quickly check whether important parameters are in the desired range. They deliver an immediate result and thus enable a fast response.

Complete mini-lab

QUANTOFIX® tests are immediately ready-to-use. They do not require additional accessories. The test strips are intended for single use, maintenance or calibration are not required.

Quantitative, documented results with QUANTOFIX® Relax

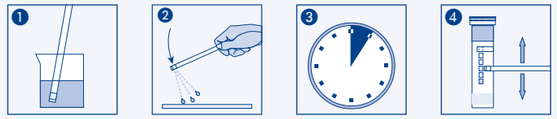
The strip reader QUANTOFIX® Relax (see page 24) provides objective and quantitative results for many important parameters (see page 14). Measurement data including time, date and sample ID are printed and stored and can be transmitted to an information system. This allows the rapid and reliable documentation of test results, which proved to be especially useful for QC departments.

Good to know

Many customers receive our QUANTOFIX® test strips as OEM product.

How it's done

Application of QUANTOFIX® test strips



Dip in | Shake off | Wait | Read off

Semi-quantitative test strips

QUANTOFIX®

Rapid

- Just Dip & Read
- Results within seconds
- Always ready for use

Easy

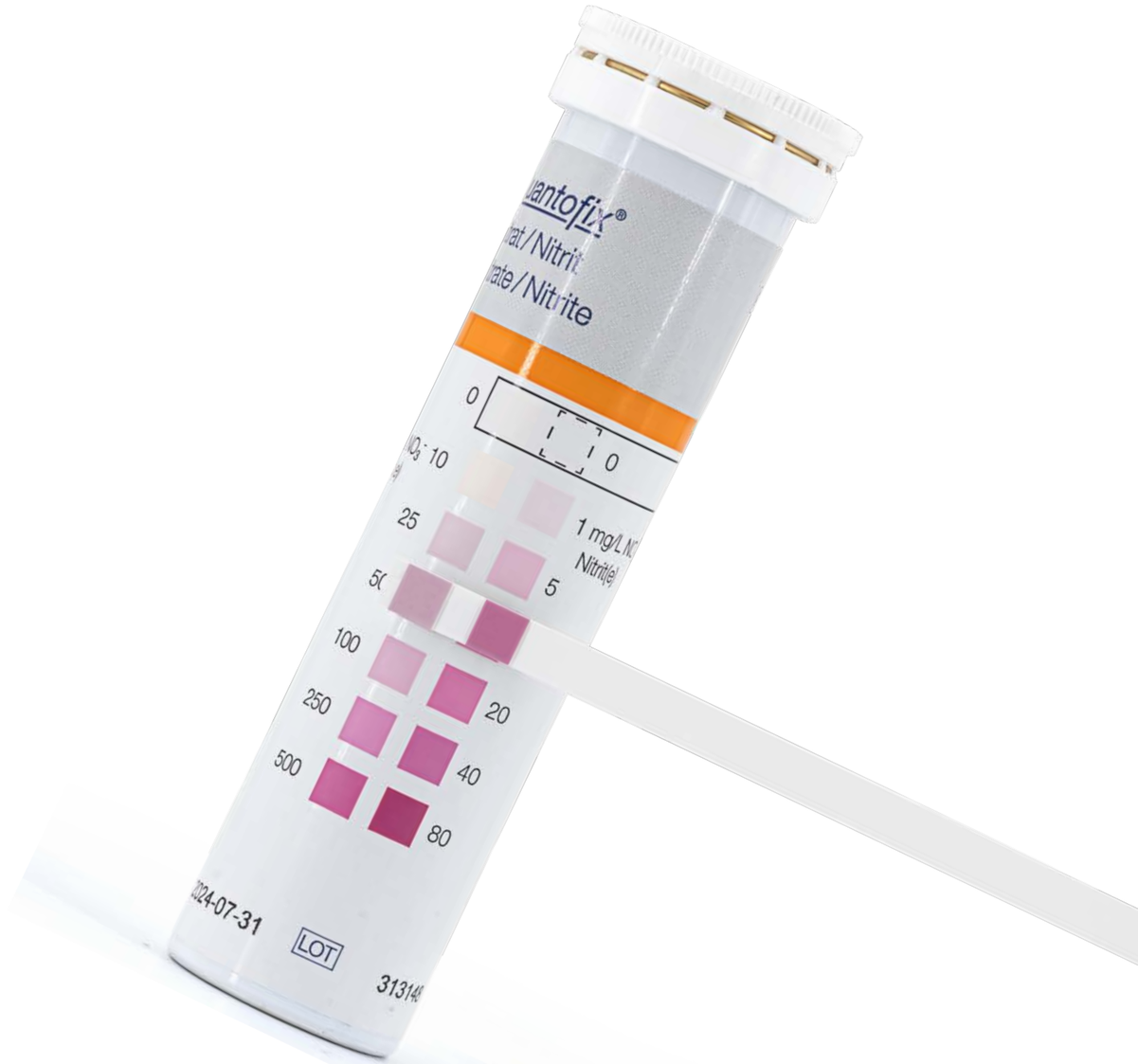
- No calibration
- No maintenance
- No accessories

Reliable

- Desiccant in the stopper for optimal protection of the strips against humidity
- Color chart confirmed with traceable standards
- Automatic evaluation with QUANTOFIX® Relax for safe documentation

Good to know

Many QUANTOFIX® test strips can be also evaluated on the strip reader QUANTOFIX® Realx (see page 24)



Ordering information

Test	REF	Measuring range (visual)	Measuring range (instrumental)	Number of tests	Shelf life	Method	Color change	QUANTOFIX® Relax	Additional reagent	CE / disinfection	GHS	Test
Active Oxygen	91349	0 · 4 · 8 · 15 · 25 mg/L KMPS	–	100	2.5 years	Redox reaction	yellow → green					Active Oxygen
Aluminum	91307	0 · 5 · 20 · 50 · 200 · 500 mg/L Al^{3+}	–	100	2.5 years	Aurin tricarboxylic acid	pink → red		■		■	Aluminum
Ammonium	91315	0 · 10 · 25 · 50 · 100 · 200 · 400 mg/L NH_4^+	10–350 mg/L NH_4^+	100	2.5 years	Nessler	bright yellow → orange	■	■		■	Ammonium
Arsenic 10	91334	0 · 0.01 · 0.025 · 0.05 · 0.1 · 0.5 mg/L $As^{3+/5+}$	–	100	2.5 years	Modified Gutzeit test	white → yellow-brown		■		■	Arsenic 10
Arsenic 50	91332	0 · 0.05 · 0.1 · 0.5 · 1.0 · 1.7 · 3.0 mg/L $As^{3+/5+}$	–	100	2.5 years	Modified Gutzeit test	white → yellow-brown		■		■	Arsenic 50
Arsenic Sensitive	91345	0 · 0.005 · 0.01 · 0.025 · 0.05 · 0.1 · 0.25 · 0.5 mg/L $As^{3+/5+}$	–	100	2.5 years	Modified Gutzeit test	white → yellow-brown		■		■	Arsenic Sensitive
Ascorbic Acid	91314	0 · 50 · 100 · 200 · 300 · 500 · 700 · 1000 · 2000 mg/L vitamin C	25–1000 mg/L vitamin C	100	2.5 years	Phosphomolybdenum blue	yellow → green-blue	■				Ascorbic Acid
Calcium	91324	0 · 10 · 25 · 50 · 100 mg/L Ca^{2+}	–	60	2.5 years	Glyoxal-bis(2-hydroxyaniline)	yellow → red		■		■	Calcium
Carbonate Hardness	91323	0 · 3.8 · 7.5 · 12.5 · 18.8 · 25.0 °e	–	100	2.5 years	Mixed indicator	bright green → blue					Carbonate Hardness
Chloride	91321	0 · 500 · 1000 · 1500 · 2000 · ≥ 3000 mg/L Cl^-	–	100	2.5 years	Silver chromate	brown → yellow					Chloride
Chlorine	91317	0 · 1 · 3 · 10 · 30 · 100 mg/L Cl_2	–	100	2.5 years	Redox reaction	white → red-violet		■		■	Chlorine
Chlorine Sensitive	91339	0 · 0.1 · 0.5 · 1 · 3 · 10 mg/L Cl_2	0.1–10 mg/L Cl_2	100	2.5 years	Redox reaction	yellow → violet	■		■		Chlorine Sensitive
Chlorine Sensitive 1	91360	0 · 0.05 · 0.1 · 0.2 · 0.4 · 0.8 · 1.2 mg/L Cl_2	–	50	2.5 years	Redox reaction	white → blue-green					Chlorine Sensitive 1
Total Chlorine Sensitive 1	91361	0 · 0.01 · 0.05 · 0.1 · 0.2 · 0.4 · 0.8 mg/L Cl_2	–	50	2.5 years	Redox reaction	white → blue-green					Total Chlorine Sensitive 1
Chlorine Doxide Sensitive 1	91363	0 · 0.05 · 0.1 · 0.2 · 0.4 · 0.8 · 1.2 mg/L ClO_2	–	25	2.5 years	Redox reaction	white → blue-green					Chlorine Doxide Sensitive 1
Chromate	91301	0 · 3 · 10 · 30 · 100 mg/L CrO_4^{2-}	3–100 mg/L CrO_4^{2-}	100	2 years	Carbazide	white → violet	■	■		■	Chromate
Cobalt	91303	0 · 10 · 25 · 50 · 100 · 250 · 500 · 1000 mg/L Co^{2+}	–	100	2.5 years	Rhodanid	white → green-blue					Cobalt
Copper	91304	0 · 10 · 30 · 100 · 300 mg/L $Cu^{+/2+}$	10–300 mg/L Cu	100	2.5 years	Biquinoline	white → red-violet	■				Copper
Copper Sensitive 5	91358	0 · 0.1 · 0.5 · 1.0 · 2.0 · 5.0 mg/L $Cu^{+/2+}$	–	25	2.5 years	Organic complexing agent	white → red-violet					Copper Sensitive 5
Cyanide	91318	0 · 1 · 3 · 10 · 30 mg/L CN^-	–	100	2.5 years	Barbituric acid derivative	white → violet		■		■	Cyanide
EDTA	91335	0 · 100 · 200 · 300 · 400 mg/L EDTA	–	100	2.5 years	Bismut-xylenolorange	red → yellow					EDTA
Formaldehyde	91328	0 · 10 · 20 · 40 · 60 · 100 · 200 mg/L HCHO	10–200mg/L HCHO	100	2.5 years	Triazol	beige → blue-violet	■	■		■	Formaldehyde
Free Fatty Acids	91365	0 · 0.25 · 0.5 · 1 · 2 · 3 %	–	50	2 years	Color reaction with pH indicator	blue → yellow					Free Fatty Acids
Glucose	91348	0 · 50 · 100 · 250 · 500 · 1000 · 2000 mg/L glucose	50–2000 mg/L glucose	100	2.5 years	Enzymatic	yellow → blue-green	■				Glucose
Glutaraldehyde	91343	0 · 0.5 · 1.0 · 1.5 · 2.0 · 2.5 % glutaraldehyde	–	100	2.5 years	Mixed indicator	bright orange → magenta			■		Glutaraldehyde
Iron Sensitive 1	91359	0 · 0.05 · 0.1 · 0.2 · 0.5 · 1.0 mg/L $Fe^{2+/3+}$	–	25	2.5 years	Organic complexation	white → blue					Iron Sensitive 1
Total Iron 100	91344	0 · 2 · 5 · 10 · 25 · 50 · 100 mg/L $Fe^{2+/3+}$	–	100	2.5 years	Triazine	white → blue-violet					Total Iron 100
Total Iron 1000	91330	0 · 5 · 20 · 50 · 100 · 250 · 500 · 1000 mg/L $Fe^{2+/3+}$	5–500 mg/L Fe	100	2.5 years	2,2'-bipyridine	white → dark red	■				Total Iron 1000
LubriCheck	91336	0 · 15 · 50 · 75 · 130 · 200 mmol/L KOH	–	100	2.5 years	Mixed indicator	yellow → blue					LubriCheck
Molybdenum	91325	0 · 5 · 20 · 50 · 100 · 250 mg/L Mo^{6+}	–	100	2.5 years	Dithiol	white → green		■		■	Molybdenum
Nickel	91305	0 · 10 · 25 · 50 · 100 · 250 · 500 · 1000 mg/L Ni^{2+}	5–100 mg/L Ni^{2+}	100	2.5 years	Dimethylglyoxim	white → bright-red	■				Nickel
Nitrate 100	91351	Nitrate: 0 · 5 · 10 · 25 · 50 · 75 · 100 mg/L NO_3^- Nitrite: 0 · 0.5 · 2 · 5 · 10 · 25 · 50 mg/L NO_2^-	Nitrate: 3–100 mg/L NO_3^- Nitrite: 0.5–50 mg/L NO_2^-	100	2.5 years	Nitrate: modified Griess reaction Nitrite: Griess reaction	yellow → red-violet yellow → red-violet	■				Nitrate 100
Nitrate 250	91366	0 · 5 · 10 · 25 · 50 · 100 · 250 mg/L NO_3^-	4–250 mg/L NO_3^-	100	2 years	Modified Griess reaction	white → red-violet	■				Nitrate 250
Nitrate / Nitrite	91313	Nitrate: 0 · 10 · 25 · 50 · 100 · 250 · 500 mg/L NO_3^- Nitrite: 0 · 1 · 5 · 10 · 20 · 40 · 80 mg/L NO_2^-	Nitrate: 10–500 mg/L NO_3^- Nitrite: 0.5–80 mg/L NO_2^-	100	2.5 years	Nitrate: modified Griess reaction Nitrite: Griess reaction	Nitrate: white → red-violet Nitrite: white → red-violet	■				Nitrate / Nitrite
Nitrite	91311	0 · 1 · 5 · 10 · 20 · 40 · 80 mg/L NO_2^-	0.5–80 mg/L NO_2^-	100	2.5 years	Griess reaction	white → red-violet	■				Nitrite
Nitrite 25	91367	0.5 · 1 · 2 · 5 · 10 · 25 mg/L NO_2^-	0.5–25.0 mg/L NO_2^-	100	2 years	Griess reaction	yellow → red-violet	■				Nitrite 25
Nitrite 3000	91322	0 · 0.1 · 0.3 · 0.6 · 1 · 2 · 3 g/L NO_2^-	–	100	2.5 years	Griess reaction	yellow → red					Nitrite 3000

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QUANTOFIX®

Test	REF	Measuring range (visual)	Measuring range (instrumental)	Number of tests	Shelf life	Method	Color change	QUANTOFIX® Relax	Additional reagent	CE / disinfection	GHS	Test
Nitrite / pH	91338	Nitrite: 0 · 1 · 5 · 10 · 20 · 40 · 80 mg/L NO_2^- pH: 6.0 · 6.4 · 6.7 · 7.0 · 7.3 · 7.6 · 7.9 · 8.2 · 8.4 · 8.6 · 8.8 · 9.0 · 9.3 · 9.6	–	100	2.5 years	Nitrite: Griess reaction pH: mixed indicator	Nitrite: white → red-violet pH: yellow-orange → violet-red					Nitrite / pH
Nitrite / pH 2	91364	Nitrite: 0 · 1 · 5 · 10 · 20 · 40 · 80 · 100 mg/L NO_2^- pH: 8.0 · 8.2 · 8.4 · 8.6 · 8.8 · 9.0 · 9.2 · 9.4 · 9.6 · 9.8 · 10.0	–	100	2.5 years	Nitrite: Griess reaction pH: mixed indicator	Nitrite: white → red-violet pH: yellow-orange → violet-red					Nitrite / pH 2
Peracetic Acid 50	91340	0 · 5 · 10 · 20 · 30 · 50 mg/L peracetic acid	5–50 mg/L peracetic acid	100	2.5 years	Redox reaction	white → blue	■		■		Peracetic Acid 50
Peracetic Acid 500	91341	0 · 50 · 100 · 200 · 300 · 400 · 500 mg/L peracetic acid	50–500 mg/L peracetic acid	100	2.5 years	Redox reaction	yellow → green	■		■		Peracetic Acid 500
Peracetic Acid 2000	91342	0 · 500 · 1000 · 1500 · 2000 mg/L peracetic acid	500–2000 mg/L peracetic acid	100	2.5 years	Redox reaction	bright yellow → red	■		■		Peracetic Acid 2000
Peroxide 25	91319	0 · 0.5 · 2 · 5 · 10 · 25 mg/L H_2O_2	0.5–25 mg/L H_2O_2	100	2.5 years	Redox reaction	white → blue	■				Peroxide 25
Peroxide 100	91312	0 · 1 · 3 · 10 · 30 · 100 mg/L H_2O_2	1–100 mg/L H_2O_2	100	2.5 years	Redox reaction	white → blue	■		■		Peroxide 100
Peroxide 1000	91333	0 · 50 · 150 · 300 · 500 · 800 · 1000 mg/L H_2O_2	50–1000 mg/L H_2O_2	100	2.5 years	Redox reaction	white → brown	■				Peroxide 1000
Phosphate	91320	0 · 3 · 10 · 25 · 50 · 100 mg/L PO_4^{3-}	3–80 mg/L PO_4^{3-}	100	2.5 years	Phosphomolybdenum blue	white → blue-green	■	■		■	Phosphate
Potassium	91316	0 · 200 · 400 · 700 · 1000 · 1500 mg/L K^+	–	100	2.5 years	Dipikrylamine	yellow → orange		■			Potassium
QUAT	91337	0 · 10 · 25 · 50 · 100 · 250 · 500 · 1000 mg/L benzalkonium chloride	–	100	2.5 years	Mixed indicator	yellow → blue-green					QUAT
Silver	91350	0 · 1 · 2 · 3 · 5 · 7 · 10 g/L Ag^+	–	100	2.5 years	Silver sulfide	yellow → brown					Silver
Sulfate	91329	< 200 · > 400 · > 800 · > 1200 · > 1600 mg/L SO_4^{2-}	–	100	2.5 years	Ba-thorine-complex	red → yellow					Sulfate
Sulfite	91306	0 · 10 · 25 · 50 · 100 · 250 · 500 · 1000 mg/L SO_3^{2-}	10–500 mg/L SO_3^{2-}	100	2.5 years	Nitroprussid / Zn-hexacyanoferrate	white → salmon	■				Sulfite
Tin	91309	0 · 10 · 25 · 50 · 100 · 250 · 500 mg/L Sn^{2+}	–	100	2.5 years	Phosphomolybdic acid	white → dark blue	■				Tin
Total acid	91353	0 · 2 · 2.5 · 3.0 · 3.5 · 4.0 · 4.5 · 5.0 g/L citric acid	2–5 g/L citric acid	100	2.5 years	Mixed indicator	pink → yellow	■				Total acid
Total Sugar	91352	0 · 55 · 100 · 250 · 400 · 600 · 800 mg/L fructose / glucose	55–700 mg/L fructose / glucose	100	1 year at 2–8 °C	Enzymatic	yellow → ocher	■	■		■	Total Sugar
Zinc	91310	0 · 2 · 5 · 10 · 25 · 50 · 100 mg/L Zn^{2+}	5–40 mg/L Zn^{2+}	100	2.5 years	Dithizone	orange → red	■	■		■	Zinc
Nitrate test sets	913918	0 · 10 · 25 · 50 · 100 · 250 · 500 mg/L NO_3^- without nitrite chart, but with nitrite test field	–	150 [2)]	2.5 years	Nitrate: modified Griess reaction Nitrite: Griess reaction	white → red-violet					Nitrate test sets
Multistick for aquarium owners	91326 91327	Total hardness: 0 · 6.3 · 12.5 · 18.8 · 25.0 · 31.3 °e Carbonate hardness: 0 · 3.8 · 7.5 · 12.5 · 18.8 · 25.0 °e pH: 6.4 · 6.8 · 7.2 · 7.6 · 8.0 · 8.4	–	100 25	2.5 years	Total hardness: EDTA Carbonate hardness: mixed indicator pH: mixed indicator	Total hardness: green → red Carbonate hardness: bright green → blue pH: yellow → red					Multistick for aquarium owners

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QUANTOFIX® EZ Arsenic REF 91345.1

Range

0 · 0.005 · 0.01 · 0.025 · 0.05 · 0.1 · 0.25 · 0.5 mg/L $As^{3+/5+}$

Test Tolerance

Up to 200 mg/L iron.

Content

The test kit contains two compact, transparent, durable and easy to carry PET reaction vessels. The vessel is closed during the reaction process to prevent the arsine gas release to the environment.

Information

The test strips contain mercuric bromide and all other required reagents (zinc powder and sulfamic acid) for testing arsenic are included. Production of health hazardous gases during testing time is minimized by special equipment and procedure. All reagents are easy to dose and packed safely.

AQUADUR® and other test strips

Tests for special applications

A range of tests was developed for specific applications and questions. They provide solutions for particular requirements.

AQUADUR® – easy determination of water hardness

AQUADUR® test strips are made for the easy determination of water hardness allowing to optimize the dosing of water softeners.

AQUADUR® Sensitive – highly sensitive determination of water hardness

Feed water for reversed osmosis units needs to have a very low water hardness. AQUADUR® Sensitive is used, for example, in dialysis practices to test the quality of the water after the first softening.

Moisture indicators without cobalt chloride

Commonly used moisture indicators often contain cobalt chloride which has been found to be carcinogenic and toxic. Contact to these types of indicators may present a health and safety risk to staff. The patented non-toxic moisture indicators eliminate these risks and increase safety. They have a very clear color change from red to yellow.

Good to know

- < 50 ppm $CaCO_3$ – very soft water
- 50–120 ppm $CaCO_3$ – soft water
- 120–240 ppm $CaCO_3$ – medium hard water
- 240–360 ppm $CaCO_3$ – hard water
- Above 360 ppm $CaCO_3$ – very hard water

Ordering information

Test	REF	Measuring range	Presentation	Shelf life	GHS	Test
■ Ag-Fix for silver in fixing baths	90741	0 · 0.5 · 1 · 2 · 3 · 5 · 7 · 10 g/L Ag^+ pH 4 · 5 · 6 · 7 · 8	Box of 100 test strips 6 x 95 mm	2.5 years		Ag-Fix for silver in fixing baths
■ Ammonia test	90714	0 · 0.5 · 1 · 3 · 6 mg/L NH_4^+	Box of 25 test strips 7 x 60 mm	2.5 years		Ammonia test
■ AQUADUR® 4–14, box	91239	< 54 · > 72 · > 151.2 · > 252 ppm $CaCO_3$	Box of 100 test strips 6 x 95 mm	2 years		AQUADUR® 4–14, box
■ AQUADUR® 4–21, box	91220	< 54 · > 72 · > 126 · > 252 · > 378 ppm $CaCO_3$	Box of 100 test strips 6 x 95 mm	2 years		AQUADUR® 4–21, box
■ AQUADUR® 4–21, bulk	91222	< 54 · > 72 · > 126 · > 252 · > 378 ppm $CaCO_3$	Pack of 5000 test strips without scale	15 months		AQUADUR® 4–21, bulk
■ AQUADUR® 4–21, individually sealed	91224	< 54 · > 72 · > 126 · > 252 · > 378 ppm $CaCO_3$	1000 test strips, individually sealed with scale	1 year		AQUADUR® 4–21, individually sealed
■ AQUADUR® 4–21, individually sealed	91240	< 54 · > 72 · > 151.2 · > 252 · > 378 ppm $CaCO_3$	1000 test strips, individually sealed with scale	1 year		AQUADUR® 4–21, individually sealed
■ AQUADUR® 5–25, box	91201	< 54 · > 90 · > 180 · > 270 · > 360 · > 450 ppm $CaCO_3$	Box of 100 test strips 6 x 95 mm	2 years		AQUADUR® 5–25, box
■ AQUADUR® 5–25, bulk	91221	< 54 · > 90 · > 180 · > 270 · > 360 · > 450 ppm $CaCO_3$	Pack of 5000 test strips without scale	15 months		AQUADUR® 5–25, bulk
■ AQUADUR® 5–25, individually sealed	91223	< 54 · > 90 · > 180 · > 270 · > 360 · > 450 ppm $CaCO_3$	1000 test strips, individually sealed with scale	1 year		AQUADUR® 5–25, individually sealed
■ AQUADUR® 5–25, test sets	912902	< 54 · > 90 · > 180 · > 270 · > 360 · > 450 ppm $CaCO_3$	Sets of 3 individually sealed test strips, pack of 50 sets	1 year		AQUADUR® 5–25, test sets
■ AQUADUR® Sensitive, box	91243	0 · 5.4 · 10.8 · 18.8 ppm $CaCO_3$	Box of 50 test strips 6 x 95 mm	2 years		AQUADUR® Sensitive, box
■ AQUADUR® TH 400, box	91202	0 · 25 · 50 · 120 · 250 · 425 ppm $CaCO_3$	Box of 50 test strips 6 x 95 mm	2 years		AQUADUR® TH 400, box
■ Chlorine test	90709	10 · 50 · 100 · 200 mg/L Cl_2	Reel of 5 m length and 10 mm width	2 years		Chlorine test
■ Cyanuric acid test (swimming pools)	90710	0 · 50 · 100 · 150 · 300 mg/L Cya	Box of 25 test strips 6 x 95 mm	2.5 years		Cyanuric acid test (swimming pools)
■ Fluoride test	90734	0 · 2 · 5 · 10 · 20 · 50 · 100 mg/L F^-	Box of 30 test discs with reagents	2 years		Fluoride test
■ Indiquat (QUATs)	–	According to customer request	Reel of 5 m length and 10 mm width	2 years		Indiquat (QUATs)
■ Moisture indicator	90801	20 · 30 · 40 · 50 · 60 · 70 · 80 % rel. humidity	Pack of 12 adhesive labels 50 x 100 mm	2 years	■	Moisture indicator
■ Moisture indicator	908901	8 % rel. humidity	Pack of 1000 pcs 60 x 35 mm	1 year	■	Moisture indicator
■ Non-toxic moisture indicator without cobalt chloride	908903	8 % rel. humidity	Pack of 1000 pcs 60 x 35 mm	1 year		Moisture indicator without cobalt chloride
■ Ozone test (air)	90736	< 90 · 90–150 · 150–210 · > 210 µg/m^3 O_3	Box of 12 test strips 10 x 95 mm	1.5 years		Ozon test (air)
■ Saltesmo (halide ions)	90608	0 · 0.25 · 0.5 · 1 · 2 · 3 · 4 · 5 g/L NaCl	Box of 30 test discs	1.5 years		Saltesmo (halide ions)
■ Swimming pool test 3 in 1	90752	Free Chlorine: 0 · 0.5 · 1 · 3 · 5 · 10 mg/L Cl_2 Alkalinity: 0 · 80 · 120 · 180 · 240 mg/L $CaCO_3$ pH: 6.4 · 6.8 · 7.2 · 7.6 · 8.4	Box of 50 test strips 6 x 95 mm	2 years		Swimming pool test 3 in 1
■ Swimming pool test 5 in 1	90759	like 90752, in addition: total chlorine: 0 · 1 · 3 · 5 · 10 mg/L Cl_2 total hardness: 0 · 100 · 250 · 500 · 1000 mg/L $CaCO_3$	Box of 50 test strips 6 x 95 mm	2 years		Swimming pool test 5 in 1

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AQUADUR® and other test strips

Semi-quantitative test strips

Test papers without color chart

Simple test papers for qualitative determinations

These test papers come without a color scale. With little effort, the presence of ions and other substances can be detected. The test papers change color when the concentration is above the specified limit of detection.

Test papers for criminal investigations

Peroxtesmo KM is sensitive to peroxidase and detects blood traces.

Sperm traces can be detected using Phosphatesmo KM which is specific for acidic phosphatase. Both test papers are used in the investigation of crime scenes.

Test papers for milk analysis

The test paper Peroxtesmo MI allows the easy distinction between raw milk and high temperature milk. It is sensitive for the enzyme lactoperoxidase. In contrast to liquid indicators based on guaiacol, Peroxtesmo MI does not smell and comes without hazardous reagents which is convenient and safe for the user.

Phosphatesmo MI detects alkaline phosphatase in milk and is a rapid and easy indicator for the successful pasteurization of milk.

Test papers for oil and oil tanks

Oil test paper is recommended for the rapid determination of oil contaminations in water and soil. On contact with oil the paper turns dark blue.

AQUATEC allows the easy and reliable detection of water at the bottom of petrol and fuel oil tanks. It is also suitable to measure the thickness of water layers in oil separators.

Ordering information

Test	REF	Determination of	Presentation	Detection limit	Shelf life	GHS	Test
Aluminum test paper	90721	Aluminum ions (Al^{3+})	Box of 100 strips 20 x 70 mm	10 mg/L Al^{3+}	2 years		Aluminum test paper
Ammonium test paper	90722	Ammonia, ammonium ions (NH_3, NH_4^+)	Box of 200 strips 20 x 70 mm	10 mg/L NH_4^+	2 years	■	Ammonium test paper
Antimony test paper	90723	Antimony ions (Sb^{3+})	Box of 200 strips 20 x 70 mm	5 mg/L Sb^{3+}	2 years		Antimony test paper
AQUATEC test strips	90742	Water on the bottom of fuel tanks	Box of 100 strips 10 x 200 mm	1–2 mm water layer	2 years		AQUATEC test strips
Arsenic test paper	90762	Arsenic, arsine (As, AsH_3)	Box of 200 strips 20 x 70 mm	0.5 µg arsenic	2 years	■	Arsenic test paper
Bismuth test paper	90733	Bismuth ions (Bi^{3+})	Box of 200 strips 20 x 70 mm	60 mg/L Bi^{3+}	2 years		Bismuth test paper
Chlortesmo	90603	Chlorine, free halogens	Box of 200 strips 20 x 70 mm	1 mg/L Cl_2	2 years		Chlortesmo
Chromium test paper	90724	Chromium, chromate (Cr(VI) CrO_4^{2-})	Box of 200 strips 20 x 70 mm	2 mg/L Cr^{3+} / 5 mg/L CrO_4^{2-}	2 years		Chromium test paper
Cobalt test paper	90728	Cobalt ions (Co^{2+})	Box of 200 strips 20 x 70 mm	25 mg/L Co^{2+}	2 years		Cobalt test paper
Copper test paper	90729	Copper(II) ions (Cu^{2+})	Box of 200 strips 20 x 70 mm	20 mg/L Cu^{2+}	2 years		Copper test paper
Cuprotesmo	90601	Copper ions (Cu, Cu^+, Cu^{2+})	Box of 40 sheets 40 x 25 mm	0.05 µg Cu on surfaces	2 years		Cuprotesmo
Cyantesmo	90604	Cyanide, hydrocyanic acid (CN^-, HCN)	Reel of 5 m length and 10 mm width	0.2 mg/L HCN	2 years	■	Cyantesmo
Dipyridyl paper	90725	Iron(II) ions (Fe^{2+})	Box of 200 strips 20 x 70 mm	2 mg/L Fe^{2+}	2 years		Dipyridyl paper
Fluoride test paper	90750	Fluoride, hydrofluoric acid (F^-, HF)	Box of 200 strips 20 x 70 mm	20 mg/L F^-	2 years		Fluoride test paper
Indanthrene yellow paper	90751	Vat dyes, end-point of conversion	Box of 200 strips 20 x 70 mm	Alkaline sodium dithionite traces	2 years		Indanthrene yellow paper
Indipro	90765	Protein residues	Box of 60 test strips 10 x 95 mm and additional reagents	50 µg BSA (bovine serum albumin)	2 years	■	Indipro
Iron test paper	90726	Iron ions (Fe^{2+}, Fe^{3+})	Box of 100 strips 20 x 70 mm	10 mg/L Fe^{2+} or Fe^{3+}	2 years		Iron test paper
Lead acetate paper	90744	Hydrogen sulfide, sulfide ions (H_2S, S^{2-})	Reel of 5 m length and 7 mm width	5 mg/L S^{2-}	2 years	■	Lead acetate paper
Lead acetate paper	90745	Hydrogen sulfide, sulfide ions (H_2S, S^{2-})	Refill pack with 3 reels	5 mg/L S^{2-}	2 years	■	Lead acetate paper
Lead acetate paper	90746	Hydrogen sulfide, sulfide ions (H_2S, S^{2-})	Booklet of 100 strips 10 x 70 mm	5 mg/L S^{2-}	2 years	■	Lead acetate paper
Nickel test paper	90730	Nickel(II) ions (Ni^{2+})	Box of 200 strips 20 x 70 mm	10 mg/L Ni^{2+}	2 years		Nickel test paper
Nitratesmo	90611	Nitrate and nitrite (NO_3^-, NO_2^-)	Reel of 5 m length and 10 mm width	10 mg/L NO_3^- / 5 mg/L NO_2^-	2 years		Nitratesmo
Oil test paper	90760	Oil in water and soil	Box of 100 strips 20 x 70 mm	250 mg/L petroleum ether / 10 mg/L gasoline (high octane) / 5 mg/L fuel oil / 1 mg/L lubricating oil	3 years		Oil test paper

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Test papers without color chart

Test papers and test strips
Perfect analysis for dairy industry

Simply safe

- Fast results
- Easy to use
- Determination of pH, peroxide, peracetic acid, phosphatase and peroxidase

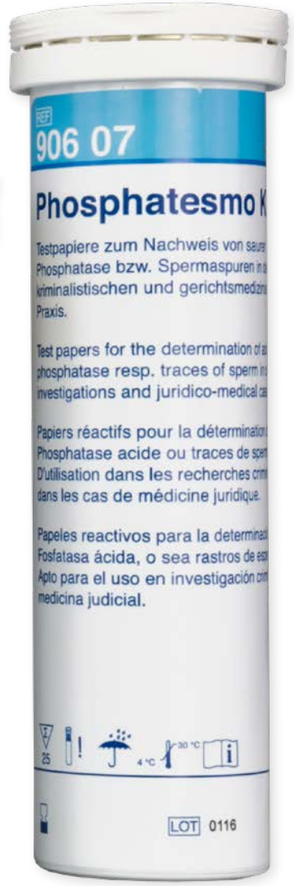
MN

Test papers without color chart

Test	REF	Determination of	Presentation	Detection limit	Shelf life	GHS
Peroxtesmo KM	90605	Blood traces (peroxidase)	Box of 25 test papers 15 x 30 mm	Blood traces	1.5 years	
Peroxtesmo KO	90606	Peroxidase in food	Box of 100 test papers 15 x 15 mm	Peroxidase traces	2.5 years	■
Peroxtesmo MI	90627	Peroxidase in milk	Box of 100 test papers 15 x 15 mm	3 % raw milk in UHT milk	1 year	
Phosphatesmo KM	90607	Sperm, acid phosphatase	Box of 25 test papers 15 x 30 mm	Sperm traces	1.5 years	
Phosphatesmo MI	90612	Alkaline phosphatase in milk	Box of 50 test strips 10 x 95 mm	0.5 % raw milk in pasteurized milk / 300 U/L alkaline phosphatase in UHT milk	1 year	
Plumbtesmo	90602	Lead, lead ions (Pb, Pb^{2+})	Box of 40 sheets 40 x 25 mm	5 mg/L Pb^{2+}	15 months	
Potassium iodate starch paper	90753	Nitrous acid, sulfur dioxide	Reel of 5 m length and 7 mm width	5 mg/L SO_2	2 years	
Potassium iodide starch paper	90754	Nitrite ions, nitrous acid, ozone, chlorine (NO_2^-, HNO_2, O_3, Cl_2)	Reel of 5 m length and 7 mm width	1 mg/L NO_2^- / 1 mg/L Cl_2	2 years	
Potassium iodide starch paper	90755	Nitrite ions, nitrous acid, ozone, chlorine (NO_2^-, HNO_2, O_3, Cl_2)	Refill pack with 3 reels	1 mg/L NO_2^- / 1 mg/L Cl_2	2 years	
Potassium iodide starch paper	90756	Nitrite ions, nitrous acid, ozone, chlorine (NO_2^-, HNO_2, O_3, Cl_2)	Booklet of 100 strips 10 x 70 mm	1 mg/L NO_2^- / 1 mg/L Cl_2	2 years	
Potassium iodide starch paper	90758	Nitrite ions, nitrous acid, ozone, chlorine (NO_2^-, HNO_2, O_3, Cl_2)	Box of 200 strips 20 x 70 mm	1 mg/L NO_2^- / 1 mg/L Cl_2	2 years	
Potassium test paper	90727	Potassium ions (K^+)	Box of 200 strips 20 x 70 mm	250 mg/L K^+	2 years	
Silver test paper	90732	Silver ions (Ag^+)	Box of 200 strips 20 x 70 mm	20 mg/L Ag^+	2 years	
Sulfide test paper	90761	Hydrogen sulfide, sulfide ions (H_2S, S^{2-})	Reel of 5 m length and 7 mm width	5 mg/L S^{2-}	2 years	
Sulfite test paper	90763	Hydrogen sulfide, sulfite ions (SO_2, SO_3^{2-})	Box of 100 strips 20 x 70 mm	10 mg/L Na_2SO_3	2 years	
Tumeric paper	90747	Boric acid, borates (H_3BO_3, BO_3^{3-})	Box of 200 strips 20 x 70 mm	20 mg/L B / 100 mg/L H_3BO_3	2 years	
Udder test paper	90748	Mastitis	20 sheets 90 x 140 mm in PE bag	Mastitis traces	2 years	
Waterfinder test paper	90630	Water in organic solutions	Reel of 7 m length and 14 mm width	Traces of water	2 years	
Watesmo	90609	Water in organic solutions	Reel of 5 m length and 10 mm width	Traces of water	2 years	
Wator	90610	Water distribution in butter	Box of 50 sheets 78 x 40 mm	Traces of water	2 years	
Zirconium test paper	90721	Zirconium ions (Zr^{4+})	Box of 100 strips 20 x 70 mm	20 mg/L Zr^{4+}	2 years	

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

Test papers without color chart



QUANTOFIX® Relax

Reflectometer for evaluation of test strips

The QUANTOFIX® Relax is the ideal device for the objective evaluation of our QUANTOFIX® test strips. It combines the simplicity of test strips with the safety of instrumental analysis and thus the best out of these two worlds. The QUANTOFIX® Relax does not require any special strips, but evaluates the normal pH-Fix and QUANTOFIX® test strips. Therefore entrance into instrumental analysis is very simple; the same strip can be used for visual and instrumental evaluation.

Excellent usability

All functions of the device can be selected with the touch screen display. Therefore, the operation is simple and intuitive, without the need for extensive training. The auto-start function initiates the measurement as soon as the test strip is placed on the strip holder. Therefore, it is not necessary to touch the device for performing a measurement. Contaminations are reliably avoided. Frequently used parameters can be stored as favorites. Simple tapping can quickly access these favorites during operation.

Quantitative results

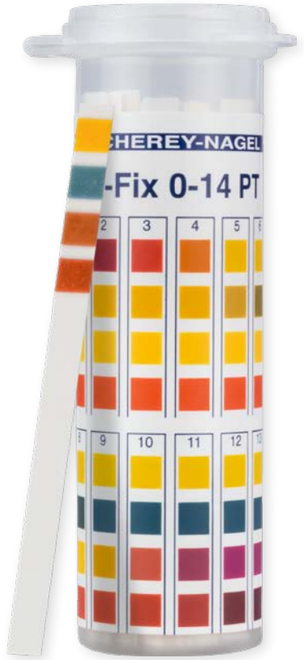
The optics of the QUANTOFIX® Relax has been proven for years in medical technology and supplies secure and standardized values. Thereby an accuracy of ≤ 10 % is achieved for many parameters; a hardly achieved level in the analysis of test strips, yet. The evaluation with the QUANTOFIX® Relax is not interfered by external factors and is therefore absolutely objective and precise. The estimation of measured values between the gradations of the scale is omitted.

Documentation and data transfer

The QUANTOFIX® Relax allows the assured documentation of analytics with test strips. Results are printed immediately after the measurement. The printout can be e.g. appended to a production protocol or kept for later quality controls. The transmission to an information system can be realized easily. In addition, the data are stored in the device and can be simply read out or printed again later on.

Good to know

For an overview of all the parameters and pH-Fix test strips available on the QUANTOFIX® Relax, please refer to page 6 and 14.



How it's done

Objective evaluation with the QUANTOFIX® Relax

Dip | Place immediately | Read off result

Ordering information

Description	REF
Reflectometer QUANTOFIX® Relax for evaluation of QUANTOFIX® test strips incl. power supply, adapter, manual, 1 roll of printer paper and certificate	91346

Accessories

Description	REF	Content
Transport case for reflectometer QUANTOFIX® Relax for individual combination with 1 QUANTOFIX® Relax, 3 rolls of printer paper, 6 QUANTOFIX® tubes, 6 batteries, power supply, manual and accessories	930889	1 piece
Printer paper for QUANTOFIX® Relax	93065	5 pieces
Barcode scanner for QUANTOFIX® Relax	93074	1 piece
Power supply for QUANTOFIX® Relax	930995	1 piece

QUANTOFIX® Relax

Objective

- High-quality optics
- Independent from external light and subjective color perception
- Standardized reaction times

Easy

- Intuitive use via touch screen
- Contactless measurement due to auto-start function
- Favorites list for the most important parameters

Safe

- Reproducible results independent of the user
- Printout of results for optimized documentation
- Accuracy for many parameters ≤ 10 %

Technical data

QUANTOFIX® Relax	
Type	Reflectometer with microprocessor control, self-test and auto-calibration
Calibration	Automatic, self calibrating
Capacity	50 strips per hour
Data storage	200 results
Display	LCD display with touch screen
Operation	alphanumeric input via touch screen
Interface	RS232, USB B (Host), PS/2 for connection of a keyboard or barcode scanner
Languages	DE / EN / FR / ES / IT / PT / PL / TR / HU
Update	Free via Internet / PC
Operating range	10 °C–40 °C, max. 80 % relative humidity (non-condensing)
Power supply	100 V–240 V~, optional with 6 AA batteries
Dimensions	200 mm x 160 mm x 75 mm
Weight	710 g (without batteries and power supply)
Warranty	2 years

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