

## pH Indicator and test papers

Whatman pH indicator and test papers are designed to meet your specific needs, and combine ease of use with unsurpassed accuracy and consistency.

The convenience of using indicator papers for the rapid determination of pH values has led to many applications in laboratories and industry.

### Features and benefits

- Instant pH readings
- Accurate for a wide range of routine pH testing
- Inexpensive
- Convenient and portable for field use

### pH indicators

#### Strips type CF (color bonded dye system)

Individual plastic support strips carry four different segments of dye-impregnated indicator papers. The resulting combination of color differences gives an extremely clear and accurate visual pH value. All the dyes are chemically bonded to the paper and cannot be leached into solution; problems associated with contamination of the sample and resultant anomalous readings are avoided.

#### Strips type CS (integral comparison chart)

Each test strip has a central segment of indicator dye and, printed alongside, eight or more different color segments marked with corresponding pH values for matching purposes. The pH test value can be read off by direct comparison of the test strip color and the color bars. Excellent for colored solutions, when any changes in color of the paper stock are automatically cancelled out.

#### Dispensers type TC (triple color band)

The strip has three separate indicator dye color bands. The individual combination of color change resulting from each test is compared with the color-coded comparison chart printed on the dispenser, giving improved speed and accuracy in reading.

#### Dispensers type SR (standard range)

A full range and some narrow ranges in this popular pH indicator dispenser.

### Indicator books

The book format is particularly suitable for educational and industrial use. In schools they are economical because the amount of paper per student can be carefully controlled.

### Acid-alkali test papers

#### Litmus blue and litmus red

These easy-to-use test papers facilitate a general test for acid or alkaline reaction. The change occurs around pH 5-8. They are particularly recommended for educational use.

#### Congo red

This test paper changes color from blue to red in the range pH 3-5 for the determination of neutralization point in strong acid/weak alkali reactions.

#### Phenolphthalein

This white paper changes to pink at pH 8.3 and becomes red at pH 10. It is useful for the determination of the neutralization point in weak acid/strong alkali reactions.



pH indicators

## Specialized test papers

### Lead acetate test paper

Used for detecting hydrogen sulfide, this rapid qualitative test paper, when wetted with distilled water, can detect as little as 5 ppm of H<sub>2</sub>S in the atmosphere or in a gas stream. Hydrogen peroxide can be detected with this paper by preblackening the paper in H<sub>2</sub>S. Concentrations as low as 4 ppm can be detected.

### Potassium iodide test paper

Used for detecting chlorine and other oxidizing agents. In acid solution, oxidizing agents react with the iodide in the test paper to liberate iodine. The paper will turn blue in the presence of an oxidizing agent (e.g. Cl<sub>2</sub>, Br<sub>2</sub>, H<sub>2</sub>O<sub>2</sub>, HNO<sub>2</sub> etc.).

## Universal indicator papers

Universal indicator papers have been impregnated with a mixture of several indicators. On contact with the sample solution they assume a particular color. A check against the color comparison table supplied allows the pH to be determined.

## Ordering information – pH indicators and test papers

Dimensions (mm)	pH range	Catalog number	Description	Packaging	Quantity/pack
<b>Strips</b>					
6 × 80	0.0 to 14.0	2613-991	Color bonded	100 strips	1
6 × 80	4.5 to 10.0	2614-991	Color bonded	100 strips	1
6 × 85	0.0 to 14.0	10362000	Panpeha Plus, non bleeding	Strip, 4 sections	100
6 × 85	2.0 to 9.0	10362010	Panpeha Plus, non bleeding	Strip, 3 sections	100
9 × 85	0.0 to 14.0	10360005	Panpeha 112	–	200
11 × 100	1.0 to 12.0	2612-990	Integral comparison strip	200 strips	1
11 × 100	1.8 to 3.8	2626-990	Integral comparison strip	200 strips	1
11 × 100	3.8 to 5.5	2627-990	Integral comparison strip	200 strips	1
11 × 100	5.2 to 6.8	2628-990	Integral comparison strip	200 strips	1
11 × 100	6.0 to 8.1	2629-990	Integral comparison strip	200 strips	1
11 × 100	8.0 to 9.7	2630-990	Integral comparison strip	200 strips	1
11 × 100	9.5 to 12.0	2631-990	Integral comparison strip	200 strips	1
<b>Dispensers (reel)</b>					
10 mm × 5 m	1.0 to 11.0	2611-628	Three colors	–	1
7 mm × 5 m	1.0 to 14.0	2600-100A	Standard full range	–	1
7 mm × 5 m	0.5 to 5.5	2600-101A	Standard narrow range	–	1
7 mm × 5 m	4.0 to 7.0	2600-102A	Standard narrow range	–	1
7 mm × 5 m	6.4 to 8.0	2600-103A	Standard narrow range	–	1
7 mm × 5 m	8.0 to 10.0	2600-104A	Standard narrow range	–	1
7 mm × 5 m	1.0 to 11.0	10362030	Panpeha	–	1
<b>Books</b>					
–	1.0 to 11.0	2600-500	–	10 books of 20 strips	1 carton*

\* 1 carton contains 10 packs of 10 books – product is 20 strips per book

## Ordering information – acid-alkali test papers

Dimensions	pH range	Catalog number	Description	Packaging	Quantity/pack
<b>Dispensers (reel)</b>					
7 mm × 5 m	–	2600-201A	Litmus blue	–	1
7 mm × 5 m	–	2600-202A	Litmus red	–	1
7 mm × 5 m	–	2600-204A	Phenolphthalein	–	1
<b>Books</b>					
10 mm × 75 mm	0.0 to 12.0	10360300	Litmus blue	–	100
–	–	2600-601	Litmus blue	10 books of 20 strips	1 carton*
–	–	2600-602	Litmus red	10 books of 20 strips	1 carton*
<b>Specialized test paper dispensers (reel)</b>					
7 mm × 5 m	–	2602-501A	Ind lead acetate	–	1
7 mm × 5 m	–	2602-500A	Potassium iodide	–	1
<b>Specialized test paper dispensers (book)</b>					
–	–	2651-500	Starch iodide	10 books of 20 strips	10*

\* 1 carton contains 10 packs of 10 books – product is 20 strips per book

## Papers for healthcare

### Antibiotic assay discs

For determining the type of causal agent of infectious diseases and for checking their sensitivity to antibiotics and chemotherapeutic agents in vitro by means of the inhibition zone determination method. The antibiogram allows rational and selective chemotherapy.

The test discs can be coated with chemotherapeutic agents, placed on the inoculated nutrient agar and incubated. The size of the inhibition zone is a measure for the effectiveness of the substances.

### Ordering information – antibiotic assay (AA) paper

Diameter (mm)	Catalog number	Quantity/pack
6	2017-006	1000
9	2017-009	1000
13	2017-013	1000

### Grade 470

Soft surface. For gelatinous samples. Used for the absorption of culture media, as a blotting paper, for electrophoresis, and amino acid chromatography.

### Ordering information – papers for healthcare applications

Dimensions (mm)	Grade	Catalog number	Format	Quantity/pack
460 × 570	470	10318493	Sheets	100
1.5" × 450'	470	10539028	Reel	1
12.7	740E	10328170	Circles	1000
1.5" × 550'	740E	10539167	Reel	1