

### Phosphate

Phosphate is utilized in water treatment, heating systems and cooling systems as a corrosion inhibitor. It is also an essential nutrient in agriculture and horticulture.

High concentrations of phosphate facilitate the growth of algae, increase corrosion and can cause environmental pollution.



HI 3833 - Phosphate



HI 38077 - Phosphate

### Phosphorus

Phosphorus belongs to the primary macronutrients group. Together with nitrogen and potassium, it is an essential element to plant growth and is needed in large amounts.

Phosphorus is absorbed by plant roots and stimulates the production of flowers and fruit.

The HI 38073 test kit measures the amount of phosphorus in soil, i.e. the phosphorus actually available to plants.

This kit is supplied complete with the Mehlich extraction kit, which allows the user to correctly extract phosphorus from a soil sample.



HI 38058 — pH



HI 3882 — pH Checker Disc®

### pH

The pH value of water can be affected by an array of dissolved substances and is often a good indicator of the quality.

In applications where water is chemically treated, the pH value should be monitored continuously. The contaminants present in wastewater precipitate when the water is neutralized chemically.

Throughout this process, the pH must be monitored since a solution that is too acidic or alkaline may inhibit the precipitation of solids and influence the efficiency of the process.

HANNA line of chemical test kits covers the pH range between 3 and 10.

The colorimetric pH kits are also available with an additional reagent to reduce chlorine interference. To order these simply add "/0" to the end of the part number.

PARAMETER	CODE	METHOD	RANGE*	SMALLEST INCREMENT	CHEMICAL METHOD	# OF TESTS	WT
Phosphate (as ortho-phosphate, PO <sub>4</sub> <sup>3-</sup> )	HI 3833	Colorimetric	0-5 mg/L	1 mg/L	Ascorbic acid	50	160 g
	HI 38077	Checker disc	0.0-5.0 mg/L	0.1 mg/L	Ascorbic acid	100	429 g
	HI 38061	Checker disc	0.00-1.00 mg/L 0.0-5.0 mg/L 0-50 mg/L	0.02 mg/L 0.1 mg/L 1 mg/L	Ascorbic acid	100	1010 g
Phosphorus (soil)	HI 38073	Checker disc	0.0-130.0 mg/L	3.3 mg/L	Ascorbic acid	100	435.5 g
pH	HI 3882	Checker disc	3.0-5.0 pH	0.1 pH	pH indicator	200	215 g
	HI 3880	Colorimetric	4.0-6.5 pH	0.5 pH	pH indicator	100	110 g
	HI 3880/0	Colorimetric	4.0-6.5 pH	0.5 pH	pH indicator	100	150 g
	HI 3881-5	Color card	4.0-8.0 pH	/	pH indicator	200	37 g
	HI 3881	Colorimetric	6.0-8.5 pH	0.5 pH	pH indicator	100	110 g
	HI 3881/0	Colorimetric	6.0-8.5 pH	0.5 pH	pH indicator	100	150 g
	HI 3886	Colorimetric	7.5-10.0 pH	0.5 pH	pH indicator	100	110 g
	HI 3886/0	Colorimetric	7.5-10.0 pH	0.5 pH	pH indicator	100	150 g
	HI 38058	Checker disc	4.0-10.0 pH	0.5 pH	pH indicator	300	215 g

\* 1 mg/L = 1 ppm