

Phosphate, Phosphorus, pH

Phosphate

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

High concentrations of phosphate facilitate growth of algae, build up of corrosion and can cause environmental pollution and eutrophication.

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 plants roots and stimulates the production of flowers and fruits.

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

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

pH

The pH value of water is related to a large number of dissolved substances and is therefore a good indicator of the quality of water.

In applications where water is treated chemically, the pH value should be measured continuously. In chemical reactions, the solids present in wastewater precipitate and the water is neutralized and decontaminated.

During these reactions, the pH must be kept at the right value, since a solution that is too acid or alkaline may interfere with the precipitation of solids and will influence the efficiency of the process. **HANNA** instruments' line of chemical test kits covers the pH range between 3 and 10.

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



HI 3833 - Phosphate



HI 38077 - Phosphate



HI 38058 - pH



HI 3882 - pH Checker Disc®

Parameter	Code	Method	Range*	Smallest Increment	Chemical Method	Number of Tests	Weight
Phosphate (as orthophosphate, PO ₄ ³⁻)	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	0.02 mg/L	Ascorbic acid	100	1010 g
			0.0-5.0 mg/L	0.1 mg/L			
			0-50 mg/L	1 mg/L			
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

For spare reagents, see section V. For accessories, see section U.