

Backpack Lab™ Water Quality Educational Test Kit



backpacklab.com



Test kits can be replaced individually

Backpack Lab™ Water Quality Education Test Kit Includes:

- 110 tests each for acidity & alkalinity, 100 tests for carbon dioxide, dissolved oxygen, hardness, nitrate & phosphate
- HANNA's pHep®4 waterproof pH/temperature tester
- HANNA's DiST®5 waterproof conductivity/total dissolved solids (TDS) tester
- Secchi disk for turbidity
- Backpack carrying case which holds all components of the kit
- 72-page teachers manual with a curriculum that meets National Science Teachers Association Standards
- Parameter summary in pdf and powerpoint format (on included CD).
- Laminated, laboratory instruction cards with step-by-step field test procedures
- Reproducible lab activity worksheets with instructions, goals, hypothesis, and testing procedure results/ observations
- A glossary of key terms in pdf format (on included CD).

Learn about environmental water parameters right from the source!

HANNA offers a series of test kits specifically designed for educators and Environmental Science students. These portable kits contain well constructed lessons and activities, and will allow the teacher to get the most out of their classroom time.

Backpack Lab™ is designed with all the necessary components in one place, reducing the chance of misplacing an item. Ideal for transporting, take this durable backpack to the field for on-site measurements.

The lesson plan and components are tied together by a comprehensive teacher's manual that includes information about each parameter, classroom activities designed to introduce students to each parameter, and detailed field testing procedures. HANNA chemical test kits and pocket testers provide teachers with a valuable tool in helping students assess the water quality of streams, rivers and lakes.

ORDERING INFORMATION

HI 3817BP Backpack Lab includes pHep®4 pocket pH tester, DiST®5 EC/TDS/temperature meter, set of 10 field test procedures, vocabulary terms blackline master, set of 10 parameter summary transparencies, set of 10 lab activity worksheets, acidity test kit, alkalinity test kit, carbon dioxide test kit, dissolved oxygen test kit, hardness test kit, nitrate test kit, phosphate test kit and backpack.

ACCESSORIES

HI 3810-100	Replacement reagents set for 100 tests (Oxygen Dissolved)
HI 3811-100	Replacement reagents set for 100 tests (Alkalinity)
HI 3812-100	Replacement reagents set for 100 tests (Hardness)
HI 3818-100	Replacement reagents set for 100 tests (Carbon Dioxide)
HI 3820-100	Replacement reagents set for 100 tests (Acidity)
HI 3833-050	Replacement reagents set for 50 tests (Phosphate)
HI 3874-100	Replacement reagent set for 100 tests (Nitrate)
HI 70004P	pH 4.01 buffer solution, for 25 calibrations
HI 70007P	pH 7.01 buffer solution, for 25 calibrations
HI 70010P	pH 10.01 buffer solution, for 25 calibrations
HI 70031P	1413 µS/cm EC calibration standard, for 25 calibrations
HI 70039P	5000 µS/cm EC calibration standard, for 25 calibrations

Backpack Lab™ contents subject to change

PARAMETER	REORDER CODE	METHOD	RANGE	CHEMICAL METHOD	# TESTS
HI 3817BP Backpack Lab™ Water Quality Educational Test Kit					
Acidity (CaCO ₃)	HI 3820	titration	0-100 mg/L (ppm) 0-500 mg/L (ppm)	methyl-orange phenolphthalein	110
Alkalinity (CaCO ₃) Phenolphthalein & Total	HI 3811	titration	0-100 mg/L (ppm) 0-300 mg/L (ppm)	phenolphthalein/ bromphenol blue	110
Carbon Dioxide	HI 3818	titration	0.0-10.0 mg/L (ppm) 0.0-50.0 mg/L (ppm) 0-100 mg/L (ppm)	phenolphthalein	110
Oxygen, Dissolved	HI 3810	titration	0.0-10.0 mg/L (ppm)	modified Winkler	110
Hardness (CaCO ₃)	HI 3812	titration	0.0-30.0 mg/L (ppm) 0-300 mg/L (ppm)	EDTA	100
Nitrate (NO ₃ ⁻ -N)	HI 3874	colorimetric	0-50 mg/L (ppm)	cadmium reduction	100
Phosphate	HI 3833	colorimetric	0-5 mg/L (ppm)	ascorbic acid	50