

## Hydroponics

Hydroponics culture is the growing of plants in a controlled environment with nutrient solutions, but without the use of soil as the supporting medium. Plant roots are fed directly, which is contrast to conventional methods where plant food is applied to the soil and the roots extract the nutrients from the soil. Plants are either grown directly in nutrient solution with only structural support or in beds through which nutrient solutions are periodically recirculated.

## Hydroponics 4-Way Kit

Grades 6 and up

Order Code 3561-01<sup>†</sup> | HF (7)

Reagent Refill R-3561<sup>†</sup> | HF (3)

Maintain proper nutrient balances and achieve optimum growing conditions in soil-less cultures. An abbreviated version of our popular Hydroponics Combination Kit [5406].

- ▶ offers tests for pH and three key nutrient factors: nitrogen, phosphorus and potassium
- ▶ sufficient reagents for 50 tests per factor
- ▶ complete labware in a sturdy case
- ▶ *Plant Nutrition Studies* handbook

### Octa-Slide 2 Comparator Tests

Factor	Range	# Tests
pH	4.5-8.0	50
Phosphorus	3-30 ppm	50
Nitrate Nitrogen	5-200 ppm, by dilution	50
Potassium	0-250 ppm	50

<sup>†</sup> **WARNING** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov/product](http://www.P65Warnings.ca.gov/product)



Code 3561-01

## Aquaponics Kit

Grades 5 and up

Order Code 3637<sup>†</sup> | LQ (9)

Reagent Refill R-3637<sup>†</sup> | LQ (4)

Aquaponics is growing rapidly as a hobby and as an industry as the farm-to-table trend continues to spread. Designed for small to mid-size systems, this test kit monitors basic water quality for both the aquaculture and hydroponics segments of your system. A detailed, diagrammed instruction manual is provided along with a quick reference lid instruction. Reagents, labware and accessories are mounted in a foam-lined carrying case. Kit is complete with labware, accessories, and reagents to perform approximately 50 repetitions per test factor. Test chemistries and comparators are compatible with fresh, brackish, or salt water systems.

### Octa-Slide 2 Comparator

Test Factor	Test Method	Range
Ammonia-N	Salicylate	0-2.0 ppm
Nitrite-N	Diazotization/Coupling	0.05-0.8 ppm
Nitrate-N	Zinc Reduction	0-15 ppm
pH	Wide Range Indicator	5.0-10.0
Iron, Ferrous & Ferric	Bipyridyl indicator	0.5-10.0 ppm

### Direct Reading Titrator

Test Factor	Test Method	Range
Alkalinity	Acid/Base	0-200 ppm
Dissolved Oxygen	Modified Winkler	0-10 ppm

<sup>†</sup> **WARNING** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov/product](http://www.P65Warnings.ca.gov/product)



Code 3637