

# Chemical Test Kits



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## Single Parameter Chemical Test Kits

### Simple and Economical Analysis

HANNA instruments' test kits are the simplest way to perform chemical analysis. The wide variety of chemical test kits presented in this section includes single parameter test kits with different measuring ranges, as well as combination test kits including all the necessary reagents for a specific application. Each kit comes complete with hard carrying case and comprehensive instruction manuals.

### Quality and Safety

HANNA instruments' test kits are supplied ready for measurements complete with all the necessary accessories. They are designed to help you to work better, faster and safer.

All HANNA instruments' chemical test kits use color coded dropper bottles, which are easy to recognize during analysis. The dropper bottles make titration extremely quick and easy without compromising accuracy.

Each plastic beaker is provided with a ported cap to prevent spills and waste. Every kit is manufactured according to the highest quality standards.

A Material Safety Data Sheet is available for each product.

### Comprehensive Instruction Manuals

Every chemical test kit is supplied with a comprehensive, easy to understand instruction manual. The manuals guide you through the analysis step-by-step, making it easy for even non-technical personnel to perform the tests.

### Colorimetric Chemical Test Kits

Quick and easy to use, HANNA instruments' colorimetric chemical test kits are the ideal solution for water analysis of many chemical parameters. The kits are equipped with a transparent container, which has the color scale right next to the sample being tested. This makes the color comparison process simple and error free. The reagents are either liquid or powder, depending on the parameter to be determined.





### **Test Kits with Checker<sup>®</sup> disc**

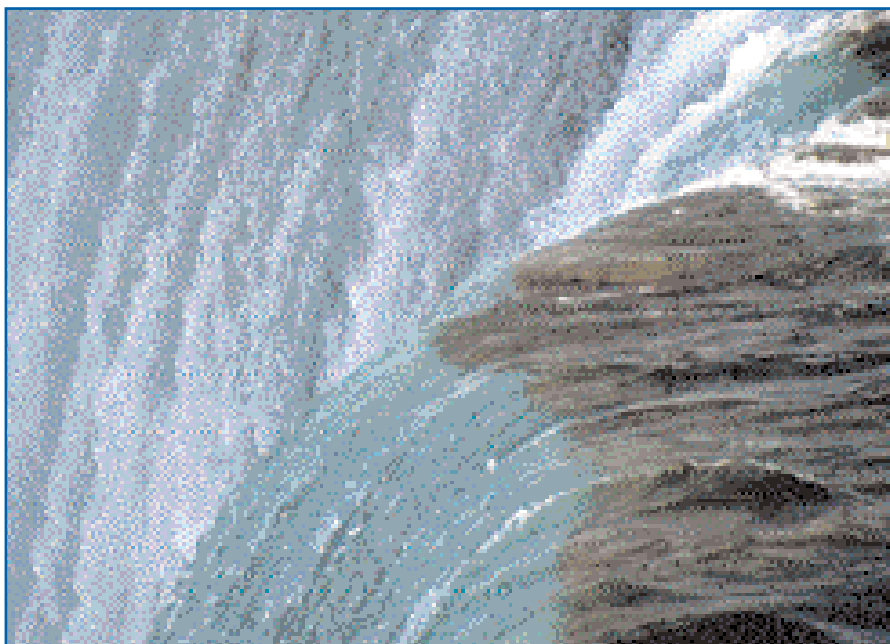
HANNA instruments' Checker<sup>®</sup> disc test kits use the technology of colorimetric kits providing greater accuracy and resolution. The Checker<sup>®</sup> disc is a color comparison wheel shaded from dark to light in proportion to the concentration of the chemical parameter being tested. All the user needs to do is put the blank and the reacted cuvettes inside the Checker<sup>®</sup> disc. By turning the wheel, the user can then visually find the concentration that best equals the reacted sample. This technique enhances resolution and accuracy. Comparison is performed visually.

### **Titration Test Kits**

These precise kits provide unsurpassed ease of use without any loss of resolution and accuracy. To determine the concentration of the chemical parameter, these kits utilize a titration technique, which consists of counting the number of drops of titrant necessary to cause a color change in the sample. The end point can be determined with enhanced accuracy and simplicity.



Thanks to their ease of use and intuitive reagent arrangement in a rugged carrying case, HANNA instruments' kits are ideal for field testing. Choose from a wide range of single and multi-parameter models for specific applications.



## HANNA instruments® Chemical Test Kit Reference Table

Parameter	Range	Analysis Method				Code	Page
		Visual	Colorimetric	Checker Disc	Titration		
Acidity	0-100, 0-500 mg/L				•	HI 3820	A6
Acidity, Olive Oil	0.00-1.00% oil acidity				•	HI 3897	A21
Acidity (Total exchangeable)	0.0-2.5 meq/100 g				•	HI 38084	A6
Alkalinity (P and Total)	0-100, 0-300 ppm				•	HI 3811	A6
Alkalinity (P and Total)	0.0-10.0, 0.0-20.0 gpg				•	HI 38013	A6
Alkalinity, Total	0-500 gpg				•	HI 38014	A6
Ascorbic Acid	10-200 mg/L				•	HI 3850	A6
Boron	0.0-5.0 mg/L				•	HI 38074	A7
Bromine	0.0-3.0 mg/L		•			HI 3830	A7
Carbon Dioxide	0.0-10.0, 0.0-50.0, 0-100 mg/L				•	HI 3818	A7
Chloride	0-100, 0-1000 mg/L				•	HI 3815	A8
Chloride (extended range)	500-10000, 5000-100000 mg/L				•	HI 38015	A8
Chloride (COD interference test)	1000 mg/L (ISO) - 2000 mg/L (EPA)	•				HI 3898	A8
Chlorine, Free	0.0-2.5 mg/L		•			HI 3831F	A8
Chlorine, Free MR	0.0-3.5 mg/L			•		HI 3875	A8
Chlorine, Free LR & MR	0.00-0.70, 0.0-3.5 mg/L			•		HI 38018	A8
Chlorine, Free & pH	0.0-2.5 mg/L; 6.0-8.5 pH		•			HI 3887	A8
Chlorine, Total	0.0-2.5 mg/L		•			HI 3831T	A8
Chlorine, Total MR	0.0-3.5 mg/L			•		HI 38016	A8
Chlorine, Total LR & MR	0.00-0.70, 0.0-3.5 mg/L			•		HI 38019	A8
Chlorine, Total HR	0.0-4.0, 0.0-20.0 mg/L				•	HI 38022	A8
Chlorine, Total (extended range)	10-200 mg/L				•	HI 38023	A8
Chlorine, Total & pH	0.0-2.5 mg/L; 6.0-8.5 pH		•			HI 3888	A8
Chlorine, Free & Total LR & MR	0.00-0.70, 0.0-3.5 mg/L			•		HI 38017	A8
Chlorine, Free & Total LR, MR & HR	0.00-0.70, 0.0-3.5, 0.0-10.0 mg/L			•		HI 38020	A8
Chromium, hexavalent MR & HR	0-100, 100-1000 mg/L				•	HI 3845	A8
Chromium, hexavalent	0.0-1.0 mg/L		•			HI 3846	A8
Copper	0.0-2.5 mg/L		•			HI 3847	A9
Copper LR	0.00-0.25 mg/L		•			HI 3856	A9
Copper (wide range)	0.00-0.25, 0.0-6.0 mg/L		•			HI 38075	A9
Cyanide	0.00-0.30 mg/L				•	HI 3855	A9
Cyanuric Acid	10-100 mg/L	turbidimetric				HI 3851	A9
Detergents	0.00-1.30 mg/L				•	HI 3857	A9
Formaldehyde	0.00-1.00%, 0.0-10.0%				•	HI 3838	A10
Glycols	Present/Absent	•				HI 3859	A10
Hardness, Calcium	0-125, 0-250 mg/L	turbidimetric				HI 38086	A10
Hardness, Calcium & Magnesium (irrigation)	> 0.0 meq/l				•	HI 38081	A10
Hardness, Calcium & Magnesium (soil)	> 0.0 meq/100 g				•	HI 38080	A10
Hardness, Total LR	0-150 mg/L				•	HI 3840	A10
Hardness, Total MR	40-500 mg/L				•	HI 3841	A10
Hardness, Total HR	400-3000 mg/L				•	HI 3842	A10
Hardness, Total	0-30 gpg				•	HI 38033	A10
Hardness, Total	0.0-30.0, 0-300 mg/L				•	HI 3812	A10
Hardness, Total	0.0-20.0 gpg, 0.0-20.0 ppm				•	HI 38034	A10
Hardness, Total & Calcium	0.0-20.0 gpg (CaCO <sub>3</sub> ), 0.0-20.0 gpg (Ca)				•	HI 38035	A10
Hydrazine	0.00-1.00 mg/L				•	HI 3849	A11
Hydrogen Peroxide	0.00-2.00, 0.0-10.0 mg/L				•	HI 3844	A11
Hydroxide	0.00-1.00, 0.0-10.0 g/L				•	HI 3839	A11
Hypochlorite	50-150 g/L				•	HI 3843	A11
Iodine	0.0-2.5 mg/L		•			HI 3832	A12
Iodine	0-5 mg/L		•			HI 3879	A12
Iron	0-5 mg/L		•			HI 3834	A12
Iron LR	0.00-1.00 mg/L				•	HI 38039	A12
Iron MR	0.0-5.0 mg/L				•	HI 38040	A12
Iron HR	0.0-10.0 mg/L				•	HI 38041	A12
Iron & Total Hardness	0-5 mg/L; 40-500 mg/L		•		•	HI 3889	A12

# HANNA instruments® **Chemical Test Kit Reference Table**

Parameter	Range	Analysis method				Code	Page
		Visual	Colorimetric	Checker Disc	Titration		
Magnesium	0.0-240.0, 0.0-725.0 mg/L				•	HI 38079	A10
Manganese LR	0.0-3.0 mg/L			•		HI 38042	A12
Manganese (irrigation)	0.0-10.0 mg/L			•		HI 38072	A12
Nitrogen, Ammonia (fresh water)	0.0-2.5 mg/L		•			HI 3824	A13
Nitrogen, Ammonia (fresh water)	0.0-3.0 mg/L			•		HI 38049	A13
Nitrogen, Ammonia (salt water)	0.0-2.5 mg/L		•			HI 3826	A13
Nitrogen, Nitrate	0-50 mg/L		•			HI 3874	A13
Nitrogen, Nitrate (irrigation water and soil)	0-60 mg/L			•		HI 38050	A13
Nitrogen, Nitrite	0.00-0.50 mg/L			•		HI 38051	A13
Nitrogen, Nitrite	0.0-1.0 mg/L		•			HI 3873	A13
Oxygen, Dissolved	0.0-10.0 mg/L				•	HI 3810	A14
Ozone	0.0-2.3 mg/L			•		HI 38054	A14
pH	4.0-8.0 mg/L		•			HI 3881-5	A15
pH	4.0-6.5 pH					HI 3880, HI 3880/0	A15
pH	6.0-8.5 pH		•			HI 3881, HI 3881/0	A15
pH	7.5-10.0 pH		•			HI 3886, HI 3886/0	A15
pH	3.0-5.0 pH			•		HI 3882	A15
pH	4.0-10.0 pH			•		HI 38058	A15
Phenols	0.00-1.00, 0.5-5.0 mg/L			•		HI 3864	A14
Phosphate	0-5 mg/L		•			HI 3833	A15
Phosphate	0.0-5.0 mg/L			•		HI 38077	A15
Phosphate	0.00-1.00, 0.0-5.0, 0-50 mg/L			•		HI 38061	A15
Phosphorus (soil)	0.0-130.0 mg/L			•		HI 38073	A15
Potassium (soil)	0-50, 50-250 mg/L	turbidimetric				HI 38082	A16
Salinity	0.0-40.0 g/Kg				•	HI 3835	A16
Silica LR	0.00-1.00 mg/L			•		HI 38066	A17
Silica HR	0-40, 0-800 mg/L			•		HI 38067	A17
Sodium Absorption Ratio (SAR)	> 0.0 meq/L				•	HI 38078	A17
Sodium (exchangeable)	0.00-56.40 meq/100 g				•	HI 38083	A18
Sulfate	20-100 mg/L	turbidimetric				HI 38000	A18
Sulfate (wide range)	100-1000, 1000-10000 mg/L				•	HI 38001	A18
Sulfite	0.0-20.0, 0-200 mg/L				•	HI 3822	A19
Zinc	0.0-3.0 mg/L		•			HI 3854	A19
Zinc	0.0-4.0, 0.0-20.0 mg/L			•		HI 38076	A19

## Multiparameter Test Kits

Application	Parameters	Code	Page
Acid Mining	Acidity, Alkalinity, Iron, pH	HI 3819	A22
Agriculture	Nitrogen, Phosphorous, pH, Potassium	HI 3895	A23
Agriculture	Nitrogen, Phosphorous, pH, Potassium	HI 3896	A23
Alkalinity and Acidity	Acidity, Alkalinity	HI 3813	A24
Aquaculture	Alkalinity, Carbon Dioxide, Hardness, Dissolved Oxygen, pH, Salinity	HI 3823	A25
Aquarium	Ammonia, Nitrate, Nitrite, pH	HI 3893	A26
Backpack Lab™	Acidity, Alkalinity, Carbon Dioxide, Hardness, Dissolved Oxygen, Nitrate, Phosphate	HI 3817BP	A32
Backpack Lab™	Nitrogen, Phosphorous, pH, Potassium	HI 3896BP	A33
Boiler Feed Water	Alkalinity, Chloride, Hardness	HI 3816	A27
Boiler Feed Water	Alkalinity, Chloride, Hardness, Phosphate, pH, Sodium Sulfite	HI 3827	A27
Boiler Feed Water	Alkalinity, Chloride, Hardness, Iron, pH	HI 3828	A27
Boiler Feed Water	Phosphate, pH, Sodium Sulfite	HI 3837	A27
Cooling System and Boiler	Alkalinity, Chloride, Hardness, Phosphate, Dissolved Oxygen, Sodium Sulfite	HI 3821	A28
Environmental Monitoring	Acidity, Alkalinity, Carbon Dioxide, Hardness, Dissolved Oxygen, pH	HI 3814	A29
Olive Oil Acidity	Olive Oil Acidity	HI 3897	A21
Swimming Pool	Alkalinity, Bromine, Chlorine, pH	HI 3825	A30
Swimming Pool	Free & Total Chlorine, pH	HI 3887	A30
Swimming Pool	Free & Total Chlorine, pH	HI 3888	A30
Water Quality	Alkalinity, Chloride, Hardness, Iron, pH, Sodium Sulfite	HI 3817	A31