## **Water Testing Methods**

### **Titrimetric**

Titrimetric tests can be used to determine the concentration of a substance in a sample solution. After the sample is treated with an indicator, a standard titrant is added until a color change indicates a completed reaction. OMEGA® offers four separate types of titration methods, allowing a choice of precision and convenience.



WTNNO3-3110, nitrate test kit, \$68.

### **Automatic Buret**

The self-zeroing automatic buret is calibrated from 0 to 10 mL in 0.1 mL increments. It is available with a squeeze valve (pinchcock), glass stopcock, or PTFE stopcock.

### **Dropper Pipet**

The drop count test uses a pipet to provide fast, precise measurements in the field. The number of drops used before the color change is multiplied by a fixed factor to provide the test result.

### **Direct Reading Titrator**

The direct reading titrator is a 1.0 mL microburet calibrated to allow direct reading of the test result. Each titrator has a specific range, but may be refilled to test higher concentrations.

### **Dropper Bottle**

The dropper bottle test uses bottle tips which deliver a consistent, standard drop size to add titrant to the sample. As with the drop count test, the number of drops used to complete the reaction is multiplied by a given equivalence factor to determine the concentration.

### MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)								
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)			
ACIDITY Titration with standard alkali to methyl orange or phenolphthalein endpoint	WTH-7182	\$36	HCI, H <sub>2</sub> SO <sub>4</sub> , H <sub>3</sub> PO <sub>4</sub>	1 drop = 0.1 or 1.0%	50 at 10% (2) Dropper Bottle			
ALKALINITY Titration with standard acid to	WTOH-4491-DR	33	Total alkalinity direct reading titrator	0 to 200 ppm/4 ppm	50 at 200 ppm (2)			
phenolphthalein (P) or total (T) alkalinity endpoint. Hydroxide	WTOH-4533-DR	47	P & T alkalinity direct reading titrator	0 to 200 ppm/4 ppm	50 at 200 ppm (3)			
determination (OH) uses barium pretreatment to eliminate	WTOH-4533	42	P & T alkalinity dropper pipet	1 drop = 10 ppm	50 at 200 ppm (3)			
carbonate interference. Test results are expressed as	WTOH-3467*	33	P & T alkalinity direct reading titrator	0-200 ppm/4 ppm	50 at 200 ppm (3)			
ppm CaCO <sub>3</sub>	WTOH-7515	55	P, T, & OH alkalinity dropper pipet	1 drop = 10 ppm	50 at 200 ppm (4)			
<b>ALUMINUM</b> Eriochrome Cyanine R	WTAL-3569	82	Octet comparator	0, 0.1, 0.15, 0.2, 0.25, 0.3, 0.4, 0.5 ppm	50 (2)			
AMMONIA NITROGEN Color development with Nessler or salicylate method. The salicylate method is preferre	WTNH3-N-4795	90	Nessler Octet comparator	1.0, 2.0, 3.0, 4.0, 5.0, 6.0,	50 (2) 7.0, 8.0 ppm			
for salt water analysis and does not contain mercury as does the Nessler method	WTNH3-N-3680	470	Nessler Colorimeter	0 to 5.0 ppm/0.05 ppm	100 (2) 0.4, 0.6, 1.0 ppm			

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

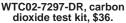
\* Accepted by EPA National Primary Drinking Water Regulations (NPDWR) & by EPA National Pollutant Discharge Elimination Systems (NPDES) Ordering Example: WTOH-4491-DR, total alkalinity direct reading titrator, \$33.



### **Individual Water Testing Kits**









WTCHEL-7144, chelant test kit, \$38.



WTCL2-3308, chlorine test kit, \$62.



WTCOLI-4-3616, coliform test kit, \$13.

MOST POPULAR MODELS HIGHLIGHTED!

				IVIUST PUF	ULAK MUDELS HIGHLIGHT				
To Order (Specify Model Number)									
Factor and Method	Model No.	Price	Test System	Range/ Sensitivity	# of Tests (# Reagents)				
Alkalinity, Titration	WTOH-4491-DR	\$33	Total alkalinity direct reading titrator	0 to 200 ppm/4 ppm	50 at 200 ppm (3)				
Alkalinity, Titration	WTOH-7515	55	P, T & OH alkalinity dropper pipet	1 drop = 10 ppm	50 at 200 ppm (4)				
Aluminum, Eriochrome Cyanine R	WTAL-3569	82	Octet comparator	0, 0.1, 0.15, 0.2, 0.25, 0.3, 0.4, 0.5 ppm	50 (2)				
Bromine, Color Development & Titration	WTBR-6824	76	DPD tablet bromine in chlorine octet comparator	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm	50 (3)				
Carbon Dioxide, Titration	WTCO2-7297-DR	36	Direct reading titrator	0 to 50 ppm/1.0 ppm	50 at 50 ppm (2)				
Carbon Dioxide, Titration	WTCO2-7525	5	Dropper pipet	1 drop = 2.5 ppm	50 at 50 ppm (2)				
Chelant, Titration	WTCHEL-7144	38	Free chelant dropper bottle	1 drop = 2 ppm EDTA 1 drop = 2 ppm NTA	100 (3)				
Chloride, Titration	WTCL-7172	50	Dropper bottle	1 drop = 10, 25, or 50 ppm	120 at 100 ppm (5)				
Chlorine Dioxide, Color Analysis	WTCLO2-3592	51	Octet comparator with axial reader	0.2, 0.6, 0.8, 2.0, 3.0, 5.0 ppm	50 (2)				
Chlorine, Free & Total	WTCL2-3308*	62	DPD Tablet octa-slide	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm	50 (2)				
Chlorine, Free & Total	WTCL2-3312*	69	DPD Tablet octa-slide	0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.8, 1.0 ppm	50 (2)				
Chlorine, Free & Total	WTCL2-6817*	67	DPD Tablet octet comparator	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm	50 (2)				
Coliform	WTCOLI-4-3616	13	Tableted nutrient based on 5 tube MPN	Presence/Absence	1 (1)				
Color, Direct Analysis	WTWAV-3528	118	Octet comparator with axial reader	0, 20, 50, 80, 110, 140, 170, 200	Unlimited (0)				
Copper, Colorimetric	WTCU-6616	82	Octet comparator with axial reader	0, 0.05, 0.10, 0.15, 0.20, 0.30, 0.40, 0.50 ppm	50 (1)				
Fluoride, Alizarin- Zirconyl Reaction	WTF-4227-R	149	Octet comparator with axial reader	0.2, 0.4, 0.6, 0.8, 1.0, 1.2, 1.4, 1.6 ppm	50 (2)				
Hardness, Titration	WTCA-3037-DR	46	Low range total hardness direct reading titrator	0 to 10 ppm/0.2 ppm	50 at 10 ppm (3)				

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

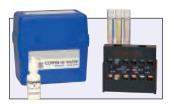
Convenient reagent refill packages available. When ordering, place prefix "R-" in front of Model Number. Contact OMEGA for price and delivery terms. *Example: R-WTCU-6616, copper (colorimetric) reagent refill package, \$6.* 

<sup>\*</sup> National Primary Drinking Water Regulations (NPDWR), EPA Accepted.

<sup>†</sup> National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted



## **Individual Water Testing Kits**



WTCU-6616, copper test kit, \$82.



WTCA-4824-LT-01, hardness test kit, \$53.



WTMO-6628, molybdate/ molybdenum test kit, \$63.



WTNNO3-3110, nitrate test kit, \$68.

Factor and Method	Model No.	Price	Test System	Range/ Sensitivity	# of Tests (# Reagents)
Hardness, Titration	WTCA-3609	\$44	Fresh & salt water hardness direct reading titrator	0 to 200 ppm/4 ppm	50 (3)
Hardness, Titration	WTCA-4482-DR-LT	40	Total hardness direct reading titrator	0 to 200 ppm/4 ppm	50 at 200 ppm (3)
Hardness, Titration	WTCA-4482-LI	36	Total hardness dropper pipet	1 drop = 10 ppm or 1 gpg 20 gpg	50 at 200 ppm or (3)
Hardness, Titration	WTCA-4824-DR-LT	54	Calcium, magnesium, & total hardness direct reading titrator	0 to 200 ppm/4 ppm	50 at 200 ppm (5)
Hardness, Titration	WTCA-4824-LT-01	53	Calcium, magnesium, total hardness dropper pipet 1 drop = 10 ppm or 1 gpg		50 at 200 ppm or 20 gpg (5)
Hardness, Titration	WTCA-7171	36	Total hardness dropper bottle	1 drop = 10, 25, or 50 ppm	100 (3)
Hydrogen Peroxide, Colorimetric	WTH2O2-3188	96	DPD tablet octet comparator	Low: 0.1, 0.3, 0.5, 0.75, 1.0, 1.25, 1.5, 2.0 ppm High: 2, 6, 10, 15, 20, 25, 30, 40 ppm	50 (2)
Iron, colorimetric	WTFE-7787	89	Total iron octet comparator with axial reader	0.05, 0.10, 0.20, 0.30, 0.40, 0.60, 0.80, 1.0 ppm	50 (2)
Molybdate/ Molybdenum, Colorimetrically	WTMO-3346	76	Thioglycolate, molybdate octa-slide	30, 60, 90, 120, 150, 180, 240, 300 ppm	50 (2)
Molybdate/ Molybdenum, Colorimetrically	WTMO-6628	63	Xanthate, sodium molybdate octet comparator	1, 2, 3, 4, 5, 6, 8, 10 ppm	100 (2)
Morpholine, Colorimetrically	WTMOR-3133	113	Octet comparator	0, 1, 2, 4, 5, 6, 8, 10 ppm	100 (5)
Nitrate Nitrogen, Colorimetrically	WTNNO3-3110	68	Octet comparator	0.25, 0.5, 1.0, 2.0, 4.0, 6.0, 8.0, 10.0 ppm	40 (2)
Nitrite, Sodium, Titration	WTNO2NA-7101	46	Permanganate dropper pipet	1 drop = 50 or 100 ppm	50 at 1000 or 2000 ppm (2)
Nitrite, Sodium, Titration	WTNO2NA-7101-DR	49	Permanganate direct reading titrator	0 to 1000 ppm/20 ppm	50 at 1000 ppm (2)
	<del></del>				

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

\* National Primary Drinking Water Regulations (NPDWR), EPA Accepted. Convenient reagent refill packages available. When ordering, place prefix "R-" in front of Model Number. Contact OMEGA for price and delivery terms. *Example: R-WTFE-7787*, *iron (colorimetric)* reagent refill package, \$18.

<sup>†</sup> National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted.



## **Individual Water Testing Kits**



WTSAL-7459, salinity titration test kit, \$58.



WTSI-4463, silica test kit, \$67.



WTSO3-7132, sulfite test kit, \$40.



WTZN-7391-01, zinc test kit, \$83.

#### MOST POPULAR MODELS HIGHLIGHTED!

		MUST PUPULAN MUDELS HIGHLIGHTE					
Factor and Method	Model No.	Price	Test System	Range/ Sensitivity	# of Tests (# Reagents)		
Oxygen, Dissolved, Azide Modified Winkler	WTDO-5860	\$50	All liquid reagents direct reading titrator	0 to 10 ppm/0.2 ppm	50 at 10 ppm (5)		
Phosphate, Various	WTPO4-4401	70	Vanadate molybdate octet comparator	10, 20, 30, 40, 50, 60, 70, 80 ppm	50 (1)		
Phosphonate, Titration	WTPHOS-7625	46	CAS dropper pipet	1 drop = 1 ppm HEDP/PBTC	50 at 20 ppm (5)		
Phosphonate, Titration	WTPHOS-7625-DR	51	CAS direct reading titrator	0 to 20 ppm/0.4 ppm HEDP/PBTC	50 at 20 ppm (5)		
Polyquat, Polyelectric Titration	WTPQUAT-7056	59	Dropper bottle	1 drop = 1 ppm	100+ (5)		
Potassium, Turbidity	WTK-3138	59	Turbidity reading tube	6, 8, 10, 20, 30, 40, 50 ppm	100 (2)		
QAC, Titration	WTQAC-3043-DR	33	Direct reading titrator	0 to 500 ppm/10 ppm	50 at 500 ppm (2)		
Salinity, Titration	WTSAL-7459	58	Direct reading titrator	0 to 40 ppt/0.4 ppt	50 at 20 ppt (2)		
Silica, Molybdosilicate Color Reaction	WTSI-4463	67	Octet comparator	0.5, 1.0, 2.0, 3.0, 4.0, 6.0, 8.0, 10.0 ppm or 5, 10, 20, 30, 40, 60, 80, 100 ppm	50 (4)		
Sulfide, Methylene Blue	WTS-4456 <sup>†</sup>	53	Total sulfide	0.2, 0.5, 1.0, 2.0, 5.0, octet comparator	50 (3) 10.0, 15.0, 20.0 ppm		
Sulfite, Methylene Blue	WTSO3-7132	40	Dropper bottle	1 drop = 2, 5, or 10 ppm	100+ (3)		
Sulfite, Titration	WTSO3-7175-DR	45	Direct reading titrator	0 to 100 ppm/2 ppm	50 at 100 ppm (3)		
Turbidity	WTTURB-7519	61	Dropper pipet	5 to 100 JTU/5 JTU 10 to 200 JTU/10 JTU	50 at 10 or 20 JTU (1)		
Zinc, Colorimetric Analysis	WTZN-7391-01	83	Octet comparator	0, 1, 2, 3, 4, 6, 8, 10 ppm	50 (2)		
Zinc, Colorimetric Analysis	WTZN-7417-01	84	Octet comparator	0, 0.2, 0.4, 0.6, 0.8, 1.0, 1.2, 1.4 ppm	50 (2)		

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

Convenient reagent refill packages available. When ordering, place prefix "R-" in front of Model Number. Contact OMEGA for price and delivery terms. *Example: R-WTDO-5860*, oxygen (dissolved azide) reagent refill package, \$30.

<sup>\*</sup> National Primary Drinking Water Regulations (NPDWR), EPA Accepted.

† National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted.



## **Individual Water Testing Kits**







WTCO2-7297-DR, carbon dioxide testing kit, \$36.

WTCHEL-7144, chelant testing kit, \$38.

Convenient reagent refill packages available. When ordering, place prefix "R-" in front of Model Number. Contact OMEGA for price and delivery terms.

MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)									
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)				
BLEACH (See Chlorine Bleach)									
BROMINE Color development with DPD;	WTBR-6955	\$62	DPD tablet octet comparator	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm	50 (1)				
titration using DPD and ferrous ammonium sulfate. With WTBR-6824 kit, bromine can be separated from chlorine determination using glycine	WTBR-6824	76	DPD tablet bromine in chlorine octet comparator	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm	50 (3)				
CALCIUM (See Hardness)		l							
CARBON DIOXIDE Titration with standard alkali	WTCO2-7297-DR	36	Direct reading titrator	0 to 50 ppm/1.0 ppm	50 at 50 ppm (2)				
CAUSTIC	WTNAOH-7516-DR	55	Direct reading titrator	0 to 10%/0.2%	50 at 10% (4)				
Titration to phenolphthalein endpoint with standard acid	WTNAOH-7181	40	Dropper bottle	1 drop = 0.1 or 1%	50 at 10% (3)				
CHELANT Back titration with magnesium for free; titration with bismuth nitrate for total	WTCHEL-7144	38	Free chelant dropper bottle	1 drop = 2 ppm EDTA 1 drop = 2 ppm NTA	100 (3)				
CHLORIDE	WTCL-3468*	39	Direct reading titrator	0 to 50 ppm/1 ppm	50 (2)				
Argentometric titration. Kits WTCL-7172 and WTCL-7247	WTCL-4503-DR	43	Direct reading titrator	0 to 200 ppm/4 ppm 0 to 20,000 ppm/400 ppm	50 at 200 ppm (4)				
contain hydrogen peroxide to eliminate sulfite interference	WTCL-7459	58	Salinity direct reading titrator	0 to 20 ppt/0.4 ppt	50 at 20 ppt (2)				
	WTCL-7172	50	Dropper bottle	1 drop = 10, 25, or 50 ppm	120 at 100 ppm (5)				
	WTCL-7247	50	Dropper bottle	1 drop = 2, 5, or 10 ppm	120 at 10 ppm (5)				
			1	1					

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

<sup>\*</sup> Accepted by EPA National Primary Drinking Water Regulations (NPDWR) and EPA National Pollutant Discharge Elimination Systems (NPDES). Ordering Example: WTBR-6824, DPD tablet bromine in chlorine test kit, \$76.







Convenient reagent refill packages available. When ordering, place prefix "R-" in front of Model Number. Contact OMEGA for price and delivery terms.

WTCL2-3176, chlorine test kit, \$65.

### MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)									
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)				
CHLORINE Low concentrations of free, total, and various forms of combined chlorine are determined colorimetrically using DPD tablets or liquids, or by ferrous ammonium sulfate/DPD titration. Higher concentrations are best determined using iodometric titration, which indicates total chlorine only.									
Free & Total	WTCL2-6817*	\$67	DPD Tablet octet comparator	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm	50 (2)				
	WTCL2-6819*	67	DPD Tablet octet comparator	0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.8, 1.0 ppm	50 (2)				
	WTCL2-3308*	62	DPD Tablet octa-slide	0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0, 3.0 ppm	50 (2)				
	WTCL2-3312*	69	DPD Tablet octa-slide	0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.8, 1.0 ppm	50 (2)				
	WTCL2-3313*	69	DPD Tablet octa-slide	1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0 ppm	50 (2)				
	WTCL2-3314*	98	DPD Tablet 2 octa-slide	Low: 0.1 to 1.0 ppm High: 1.0 to 6.0 ppm	100 (2)				
	WTCL2-3670-LI	355	DPD Liquid colorimeter	0 to 4.0 ppm/0.05 ppm	144 (3)				
DPD-FAS Titration	WTCL2-3176*†	65	Direct reading titrator	0 to 10 ppm/0.2 ppm	50 at 10 ppm (4)				

 $\textit{Kit contents vary. Each kit comes complete with everything necessary to perform the specified \textit{test.}}$ 

Ordering Example: WTCL2-6819, free and total chlorine tablet octet comparator, \$67.

<sup>\*</sup> Accepted by EPA National Primary Drinking Water Regulations (NPDWR). EPA National Pollutant Discharge Elimination Systems (NPDES).

<sup>\*\*</sup> Free and combined chlorine, bromine, iodine, chlorine mixtures, chlorine dioxide, chlorite, bromine, nitrogen trichloride, ozone, and ozone-chlorine mixtures.

<sup>†</sup> National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted.

## **Individual Water Testing Kits**

Convenient reagent refill packages available. When ordering, place prefix "R-" in front of Model Number. Contact OMEGA for price and delivery terms.



### MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)								
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)			
CHLORINEContinued								
lodometric Titration (For high chlorine levels)	WTCL2-4501	\$42	Dropper pipet	1 drop = 1 ppm	50 (3)			
DPD Chlorine/pH phenol red combination	WTCL2-6980	245	DPD tablet/ phenol red tablet 3 octet comparators	Low: 0.1 to 1.0 ppm High: 1.0 to 6.0 ppm pH: 6.8 to 8.2	200 (5)			
CHLORINE BLEACH lodometric titration	WTOCL-7894	49	Dropper pipet	1 drop = 0.005%, 0.05%, or 0.5%	50 at 0.1, 1.0, or 10% (3)			
CHLORINE DIOXIDE Color analysis using DPD tablets with glycine	WTCLO2-3592	51	Octet comparator with axial reader	0.02, 0.6, 0.8, 2.0, 3.0, 5.0 ppm	50 (2)			
COLIFORM	WTCOLI-4-3616	13	Tableted nutrient based on 5 tube MPN	Presence/Absence	1 (1)			
COLOR Direct analysis with platinum cobalt color standards or visual matching by adding a standard color solution dropwise to uncolored water. Test results are APHA Standard Color Units.	WTWAV-3528	118	Octet comparator with axial reader	0, 20, 50, 80, 110, 140, 170, 200	Unlimited (0)			

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

Ordering Example: WTWAV-3528, color test kit dual range dropper pipet, \$118.













WTCA-4824-LT-01, hardness test kit, \$53.

### MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)									
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)				
COPPER Diethyldithiocarbamate	WTCU-6616	\$82	Octet comparator with axial reader	0, 0.05, 0.10, 0.15, 0.20, 0.30, 0.40, 0.50 ppm	50 (1)				
colorimetric analysis	WTCU-3673	400	Colorimeter	0 to 8 ppm/0.03 ppm	100 (1)				
DETERGENTS (Anionic) Reaction with bromphenol blue, extraction, addition of standard color solution	WTDT-4507	55	Dropper pipet	1 drop = 1.0 ppm	60 at 5.0 ppm (3)				
FLUORIDE Alizarin-Zirconyl reaction	WTF-4227-R	149	Octet comparator with axial reader	0.2, 0.4, 0.6, 0.8, 1.0, 1.2, 1.4, 1.6 ppm	50 (2)				
HARDNESS EDTA titration is used for	WTCA-3609	44	Fresh & salt water hardness direct reading titrator	0 to 200 ppm/4 ppm	50 (3)				
determinations. All kits express results as CaCO <sub>3</sub> . Some also express results as gpg. Kit	WTCA-4482-DR-LI	41	Total hardness direct reading titrator	0 to 200 ppm/4ppm	50 at 200 ppm (3)				
WTCA-3609 has conversion factor for Ca**. The -LI suffix indicates an all liquid reagent system; the -LT suffix indicates system using a	WTCA-4482-LI	36	Total hardness dropper pipet	1 drop = 10 ppm or 1 gpg	50 at 200 ppm or 20 gpg (3)				
	WTCA-4482-DR-LT	40	Total hardness direct reading titrator	0 to 200 ppm/4 ppm	50 at 200 ppm (3)				
liquid buffer and a tablet indicator	WTCA-4824-LT-01	53	Calcium, magnesium, total hardness dropper pipet	1 drop = 10 ppm or 1 gpg	50 at 200 ppm or 20 gpg (5)				

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

Ordering Example: WTCA-3609, fresh and salt water hardness direct reading titrator water kit, \$44.

<sup>\*</sup> National Primary Drinking Water Regulations (NPDWR), EPA Accepted.



## **Individual Water Testing Kits**





### MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)								
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)			
HARDNESS Continued	WTCA-4824-DR-LT	\$54	Calcium, magnesium, & total hardness direct reading titrator	0 to 200 ppm/4 ppm	50 at 200 ppm (5)			
	WTCA-3037-DR	46	Low range total hardness direct reading titrator	0 to 10 ppm/0.2 ppm	50 at 10 ppm (3)			
	WTCA-7171	36	Total hardness dropper bottle	1 drop = 10, 25, or 50 ppm	100 (3)			
	WTCA-7246	38	Total hardness dropper bottle	1 drop = 2, 5, or 10 ppm	100 (3)			
HYDROGEN PEROXIDE Colorimetric analysis with DPD; iodometric titration	WTH202-3188	96	DPD tablet octet comparator	Low: 0.1, 0.3, 0.5, 0.75, 1.0, 1.25, 1.5, 2.0 ppm High: 2, 6, 10, 15, 20, 25, 30, 40 ppm	50 (2)			
IODINE	WTI-7253-DR	48	Direct reading titrator	0 to 50 ppm/1 ppm	50 at 50 ppm (3)			
Iodometric titration	WTI-7253	41	Dropper pipet	1 drop = 2.5 ppm	100 at 25 ppm (3)			
IRON Bipyridyl colorimetric analysis of	WTFE-3347	81	Total Iron octet comparator	0.5, 1.0, 2.0, 3.0, 4.0, 6.0, 8.0, 10.0 ppm	100 (2)			
total iron as well as ferrous/ferric.  1,10 Phenanthroline total iron	WTFE-7787	89	Total Iron octet comparator with axial reader	0.05, 0.10, 0.20, 0.30, 0.40, 0.60, 0.80, 1.0 ppm	50 (2)			
analysis is used in DC1100 colorimeter kit	WTFE-3681	485	Total Iron 1, 10 phenanthroline colorimeter	0 to 4.0 ppm/0.25 ppm	100 (2)			

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

<sup>\*</sup> National Primary Drinking Water Regulations (NPDWR), EPA Accepted. † National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted. Ordering Example: WTH202-3188, hydrogen peroxide water test kit, \$96.



# Water & Soil Instruments









WTMO-6628, molybdate/molybdenum test kit, \$63.

WTNNO3-3615, nitrate nitrogen test kits, \$77.

### MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)									
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)				
Presence of lead in solder may be tested using sodium rhodizonate. Banned for household use.	WTPB-3582	\$76	Spot plate plumbing inspector kit	Yes/No	100 (3)				
MOLYBDATE/MOLYBDENUM Determined colorimetrically using	WTMO-6628	63	Xanthate, sodium molybdate octet comparator	1, 2, 3, 4, 5, 6, 8, 10 ppm	100 (2)				
xanthate or thioglycolate method, or by titration with citric acid	WTMO-3346	76	Thioglycolate, molybdate octa-slide	30, 60, 90, 120, 150, 180, 240, 300 ppm	50 (2)				
MORPHOLINE Colorimetric analysis using naphthoquinone sulfonic acid salt	WTMOR-3133	113	Octet comparator	0, 1, 2, 4, 5, 6, 8, 10 ppm	100 (5)				
NITRATE NITROGEN	WTNNO3-3110	68	Octet comparator	0.25, 0.5, 1.0, 2.0, 4.0, 6.0, 8.0, 10.0 ppm	40 (2)				
Determined colorimetrically by	WTNNO3-3615	77	Octet comparator with axial reader	0, 0.2, 0.4, 0.6, 0.8, 1.0 ppm	50 (2)				
diazotization/coupling reaction after reduction to nitrite by cadmium. Results expressed as NO <sub>3</sub> -N; Phosphate test in kit <b>WTNNO3-3119</b> uses ascorbic acid reduction	WTNNO3-3677	485	Cadmium reduction colorimeter	0 to 3.0 ppm/0.05 ppm	50 (2)				

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

Ordering Example: WTMO-6628, molybdate/molybdenum, \$63.



# *Individual Water Testing Kits*

Convenient reagent refill packages available. When ordering, place prefix "R-" in front of Model Number. Contact OMEGA for price and delivery terms.



WTH2O2-7191, peracetic acid, \$55.

### MOST POPULAR MODEL HIGHLIGHTED!

				MOOT TOT CEATE IN	IODEL IIIGIIEIGIIIED			
To Order (Specify Model Number)								
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)			
NITRITE NITROGEN Determined colorimetrically by	WTNNO2-7421	\$79	Octet comparator	0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8 ppm	50 (3)			
diazotization/coupling. Kit WTNNO2-7421 reports as NO <sub>2</sub> N; kit	WTNNO2-7674	109	Octet comparator with axial reader	0.02, 0.04, 0.06, 0.08, 0.10, 0.15, 0.20, 0.30 ppm	50 (3)			
NITRITE, SODIUM Titration using permanganate	WTNO2NA-7101-DR	49	Permanganate direct reading titrator	0 to 1000 ppm/20 ppm	50 at 1000 ppm (2)			
or ceric ammonium nitrate (CAN). Results reported as NaNO <sub>2</sub>	WTNO2NA-7101	46	Permanganate dropper pipet	1 drop = 50 or 100 ppm	50 at 1000 or 2000 ppm (2)			
	WTNO2NA-3036-DR	46	CAN direct reading titrator	0 to 1000 ppm/20 ppm	50 at 1000 ppm (2)			
	WTNO2NA-7183	32	CAN dropper bottle	1 drop = 50 ppm	50 at 1000 ppm (2)			
OXYGEN, DISSOLVED Azide modification of Winkler method	WTDO-5860	50	All liquid reagents direct reading titrator	0 to 10 ppm/0.2 ppm	50 at 10 ppm (5)			
<b>OZONE</b> Colorimetric determination using DPD	WTO3-3526	106	DPD tablet octet comparator with axial reader	0.01, 0.03, 0.07, 0.11, 0.2, 0.4, 0.7, 1.0 ppm	50 (2)			
or indigo trisulfonate. The <b>WTO3-3678</b> indigo kit can test for ozone in the presence of chlorine	WTO3-3678	575	Indigo trisulfonate Colorimeter	0 to 0.4 ppm/0.04 ppm	100 (3)			
PERACETIC ACID/HYDROGEN PEROXIDE Cerium titration of peroxide with subsequent lodometric titration of peracetic acid	WTH2O2-7191	55	Dropper bottle	1 drop = 50 ppm peroxide 1 drop = 15 ppm peracetic acid	50 (5)			

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

† National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted.

Ordering Example: WTNNO2-7421, nitrite nitrogen, octet comparator water test kit, \$79.











WTPHOS-7530-DR, phosphonate test kit, \$74.

### MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)									
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)				
PHENOLS Aminoantipyrine color development	WTPHEN-7824	\$102	Octet comparator with axial reader	0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.8, 1.0 ppm	50 (3)				
PHOSPHATE Ascorbic acid or stannous chloride reduction after forming molybdate complex yields a blue color. Comparator Vanadate molybdate method yields yellow color. All kits determine orthophosphate	WTPO4-3114	86	Ascorbic acid octet comparator	0.5, 1, 2, 3, 4, 6, 8, 10 ppm and 5, 10, 20, 30, 40, 60, 80, 100 ppm	50 (2)				
	WTPO4-3121	79	Ascorbic acid octet comparator with axial reader	0, 0.2, 0.4, 0.6, 0.8, 1.0, 1.5, 2.0 ppm	50 (2)				
concentrations. The ascorbic acid method must be used when testing salt water	WTPO4-7416	100	Stannous chloride octet comparator with axial reader	0.05, 0.1, 0.2, 0.3, 0.4, 0.6, 0.8, 1.0 ppm	50 (2)				
Carl Water	WTPO4-4401	70	Vanadate molybdate octet comparator	10, 20, 30, 40, 50, 60, 70, 80 ppm	50 (1)				
PHOSPHONATE	WTPHOS-7625-DR	\$51	CAS direct reading titrator	0 to 20 ppm/0.4 ppm HEDP/PBTC	50 at 20 ppm (5)				
Thorium titration using xylenol orange	WTPHOS-7625	46	CAS dropper pipet	1 drop = 1 ppm HEDP/PBTC	50 at 20 ppm (5)				
indicator (testing Dequest) or chrome azurol S indicator (testing Bayhibit or	WTPHOS-7530-DR	74	XO direct reading titrator	0 to 20 ppm/0.4 ppm NaAMP	50 at 20 ppm (5)				
Dequest). The xylenol orange method uses a fluoride inhibitor. All kits list equivalences for various phosphonates	WTPHOS-7530-WT	60	XO dropper bottle	1 drop = 1 ppm NaAMP	50 at 20 ppm (5)				

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

- \* National Primary Drinking Water Regulations (NPDWR), EPA Accepted.
- † National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted.

Ordering Example: WTPO4-3114, phosphate ascorbic acid octet comparator water test kit, \$86.



### Individual Water Test Kits







WTSI-4463, silica test kit, \$67.

### MOST POPULAR MODELS HIGHLIGHTED!

MADE IN

To Order (Specify Model Number)								
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)			
POLYQUAT Polyelectrolytic titration using toluidine blue indicator	WTPQUAT-7056	59	Dropper bottle	1 drop = 1 ppm	100+ (5)			
POTASSIUM Sodium tetraphenylboron turbidimetric reaction	WTK-3138	59	Turbidity reading tube	6, 8, 10, 20, 30, 40, 50 ppm	100 (2)			
The kit WTQAC-3043-DR uses a titration with sodium tetraphenyl boron. The kit WTQAC-7057 uses a titration with a polyelectrolyte in the presence of toluidine blue	WTQAC-3043-DR	33	Direct reading titrator	0 to 500 ppm/10 ppm	50 at 500 ppm (2)			
	WTQAC-7057	60	Dropper bottle	1 drop = 2, 5, or 10 ppm	100+ (5)			
SALINITY Argentometric titration	WTSAL-7459	58	Direct reading titrator	0 to 40 ppt/0.4 ppt	50 at 20 ppt (2)			
SILICA Molybdosilicate color reaction	WTSI-4463	67	Octet comparator	0.5, 1.0, 2.0, 3.0, 4.0, 6.0, 8.0, 10.0 ppm or 5, 10, 20, 30, 40, 60, 80, 100 ppm	50 (4)			
SODIUM NITRITE (See Nitrite, Sodium)								
SULFATE Turbidimetric analysis after reaction with barium	WTSO4-7778	91	Tablet octet comparator	20, 40, 60, 80, 100, 120,	50 (1) 160, 200 ppm			
	WTSO4-3683	470	colorimeter	0 to 100 pm/1.0 ppm	100 (1)			

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

<sup>\*</sup> National Primary Drinking Water Regulations (NPDWR), EPA Accepted. 
† National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted.

† National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted.

† National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted.





### MOST POPULAR MODEL HIGHLIGHTED!

To Order (Specify Model Number)								
Factor & Method	Model No.	Price	Test System	Range/Sensitivity	# of Tests (# Reagents)			
SULFIDE Pomeroy methylene blue method	WTS-4456†	\$53	Total sulfide octet comparator	0.2, 0.5, 1.0, 2.0, 5.0, 10.0, 15.0, 20.0 ppm	50 (3)			
	WTSO3-7132	40	Dropper bottle	1 drop = 2, 5, or 10 ppm	100+ (3)			
SULFITE lodometric titration. Results expressed as SO <sub>3</sub>	WTSO3-7175-DR	45	Direct reading titrator	0 to 100 ppm/2 ppm	50 at 100 ppm (3)			
	WTSO3-7175	43	Dropper pipet	1 drop = 5 ppm	50 at 100 ppm (3)			
TANNIN/LIGNIN Tungsto-molybdophosphoric acid color reaction	WTTAN-7831	94	Octet comparator	1, 2, 3, 4, 5, 6, 8, 10 ppm	50 (2)			
TURBIDITY Comparison of reacted sample with unreacted sample while adding standard turbidity reagent	WTTURB-7519	61	Dropper pipet	5 to 100 JTU/5 JTU, 10 to 200 JTU/10 JTU	50 at 10 or 20 JTU(1)			
ZINC Buffered zincon	WTZN-7391-01	83	Octet comparator	0, 1, 2, 3, 4, 6, 8, 10 ppm	50 (2)			
colorimetric analysis	WTZN-7417-01	84	Octet comparator	0, 0.2, 0.4, 0.6, 0.8, 1.0, 1.2, 1.4 ppm	50 (2)			

Kit contents vary. Each kit comes complete with everything necessary to perform the specified test.

† National Pollutant Discharge Elimination Systems (NPDES), EPA Accepted.



<sup>\*</sup> National Primary Drinking Water Regulations (NPDWR), EPA Accepted.

Ordering Example: WTSO3-7132, sulfite dropper bottle water test kit, \$40.

# omega.co.uk®

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622

Sales@omega.co.uk

## www.omega.co.uk



## **UNITED STATES**

www.omega.com 1-800-TC-OMEGA Stamford, CT.

### **CANADA**

www.omega.ca Laval(Quebec) 1-800-TC-OMEGA

#### **GERMANY**

www.omega.de Deckenpfronn, Germany 0800-8266342

### **UNITED KINGDOM**

www. omega.co.uk Manchester, England 0800-488-488 +44-(0)161-777-6611

### **FRANCE**

www.omega.fr 0800-466-342

#### **BENELUX**

www.omega.nl 0800-099-33-44



## More than 100,000 Products Available!

### Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

### Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

## pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

## Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ehernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

### Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

### Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters