

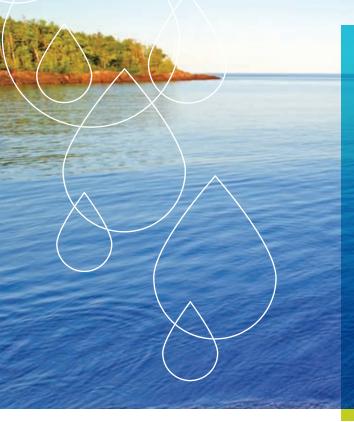
## Reliable water analysis

# Precise & Affordable

A complete product line of Spectrophotometers, Colorimeters and Turbidity Meters for water and wastewater analysis.



### Accurate results, within your reach.



### We've got you covered.

It's been said that anything worth doing is worth doing right. At Thermo Fisher Scientific we combine intelligent design with quality craftsmanship to give you the tools you need for effective water analysis, whether in the lab or in the field. In essence, we do our job right, so you can do the same.

Recognized worldwide, our water analysis instruments combine accuracy and precision with intuitive operation, dependability and ease of use. Our products are backed by substantial research and development, built with an unmatched standard of excellence.

### **Spectrophotometers**

Lab Intelligence

#### A good lab depends on expert equipment.

Thermo Scientific® Orion® AquaMate™ Spectrophotometers are the ideal instrument for water and wastewater analysis laboratories, combining innovative technology, compact design and accurate results.

- Spectrophotometers that meet your requirements—choose the AguaMate 8000 UV-Vis or AguaMate 7000 Vis
- Simple and efficient sample analysis using over 260 preprogrammed methods for common reagent chemistries
- One-point calibration adjustment feature ensures the highest accuracy from preprogrammed methods
- User customizable methods for absorbance, % transmittance and concentration testing
- Performance verification tests ensure wavelength accuracy and instrument functionality

### **Colorimeters / Turbidity Meters**

Fieldwork Essentials

## Portable design with uncompromised performances.

Thermo Scientific Orion Colorimeters and Turbidity Meters are accurate, dependable and easy to use, with handheld portability, preprogrammed methods, optimum wavelengths, user-friendly displays, and easy calibration.

- Rugged, handheld portability and waterproof options for fieldwork convenience
- User-friendly interface for quick and easy results processing
- · Compatibility with several tests and reagent types
- Approvals and regulatory requirements met in many industries

# Orion AquaMate 7000 Vis Spectrophotometer

The cost-effective solution for accurate, visible-only measurements

The AquaMate 7000 Vis Spectrophotometer offers 325 to 1100 nm selectable wavelengths and 5 nm spectral bandwidth and is ideal for most routine concentration measurements. For its relatively small footprint and lightweight design, it boasts numerous features at a competitive price. The intuitive user interface and simple, single-beam optical geometry generate accurate results.

## Orion AquaMate 8000 UV-Vis Spectrophotometer

The ideal instrument for extensive, full wavelength measurement options

The AquaMate 8000 UV-Vis Spectrophotometer offers 190 to 1100 nm selectable wavelengths and 1.8 nm spectral bandwidth and delivers unsurpassed data quality throughout the entire UV to near-IR region of the spectrum. A dual-beam optical geometry and high-intensity, instant-on xenon lamp are utilized for accurate measurements and up to seven years of maintenance-free operation. Superior signal-to-noise performance and fast wavelength scanning technology allow high-quality spectral data to be acquired quickly and reliably.







# Thermo Scientific offers a full line of Orion Colorimetry and Turbidity Meters

Using optical measurement, Colorimeters measure the concentration of a sample component and Turbidity Meters determine how cloudy a sample is.



Regulations ensure our drinking water is safe and our wastewater will not alter or destroy local ecosystems and oceans. Disinfectants, used to purify water, are commonly tested by colorimetry. Groundwater that is the source of a drinking water supply may be checked for iron level and the chemical form of that iron. Water components that increase maintenance frequency may be tested regularly to monitor and maximize time online. Many test reagents are available for measuring parameters that are reported as required on regulatory compliance permits.

Orion AquaMate Spectrophotometers include over 260 preprogrammed methods for easy and convenient measurements using Orion AQUAfast reagent chemistries or chemistries from other key reagent manufacturers. Methods are stored on the USB memory stick, so they can be added or removed from the instrument as needed. The 3-position holder allows flexibility in vial sizes with an adjustable holder for 13 to 25 mm round vials, a holder for 20 or 50 mm rectangular vials and a holder for 10 mm square vials. AquaMate Spectrophotometers also utilize performance verification tests to ensure wavelength accuracy and instrument functionality.



- Selectable wavelengths in the visible range of 325 to 1100 nm
- Single-beam optics and Tungsten-halogen lamp
- 5.0 nm spectral bandwidth, ideal for most routine concentration measurements
- Simple operation, expanded functionality and great value
- 1 year warranty

# AquaMate 8000 UV-Vis Spectrophotometer

- Selectable wavelengths in the UV and visible range of 190 to 1100 nm
- Dual-beam optics utilizing a Xenon Flash lamp for an average of five years of maintenance-free performance
- 1.8 nm spectral bandwidth for optimal resolution
- Enhanced wavelength scanning technology that acquires high-quality spectral data at speeds up to 4,200 nm per minute
- 1 year warranty



Depending on the needs of your lab, choose the **AquaMate 7000 Vis Spectrophotometer** for 325 to 1100 nm wavelengths or choose the **AquaMate 8000 UV-Vis** with full 190 to 1100 nm wavelengths for a greater range of measurement options.

Use your current chemistry reagents—no need to change. The AquaMate preprogrammed methods are compatible with many leading reagent manufacturers.



AguaMate 8000 HV-Vis Spectrophotometer	AquaMate 7000 Vis Spectrophotometer
	Single beam
1.8 nm	5.0 nm
Xenon flash lamp (5 years)	Tungsten-halogen lamp (1000 hours)
Dual silicon photodiodes	Silicon photodiode
190 to 1100 nm ±1.0 nm ±0.5 nm 11,000 nm/min 10 to 4,200 nm/min 0.2, 0.5, 1.0, 2.0, 3.0, 5.0 nm	325 to 1100 nm ±1.0 nm ±0.5 nm 11,000 nm/min 10 to 4,200 nm/min 1.0, 2.0, 3.0, 5.0 nm
Absorbance, % transmittance, concentration -0.5 to 5.0 A; -1.5 to 125 %T; ±9999 C Up to 3.5 A at 260 nm ±0.005 A at 1.0 A, <0.00025 at 0.0 A <0.00050 at 1.0 A, <0.00080 at 2.0 A RMS at 260 nm <0.0005 A/hr	Absorbance, % transmittance, concentration -0.1 to 3.0 A; -0.3 to 125 %T; ±9999 C Up to 3.0 A at 340 nm 0.5 % or ±0.005 A, whichever is greater up to 2 A <0.001 A at 0.0 A, <0.002 A at 2.0 A Peak-to peak at 340 nm 0.002 A/hr after warm-up
<0.08 %T at 220 nm and 340 nm, <0.1 %T at 340 nm and 400 nm, <1.0 %T at 198 nm	<0.08 %T at 220 nm and 340 nm, <0.1 %T at 340 nm and 400 nm, <1.0 %T at 198 nm
Graphical with LCD backlight— 9.7 x 7.1 cm (3.8 x 2.8 in)	Graphical with LCD backlight— 9.7 x 7.1 cm (3.8 x 2.8 in)
Sealed membrane with tactile response keys	Sealed membrane with tactile response keys
USB type A port for USB stick (front panel), USB type B port for computer (rear panel), USB type A port for printer (rear panel)	USB type A port for USB stick (front panel), USB type B port for computer (rear panel), USB type A port for printer (rear panel)
30 W x 40 D x 25 H cm (11.8 x 15.7 x 9.8 in)	30 W x 40 D x 25 H cm (11.8 x 15.7 x 9.8 in)
8.6 kg (19 lb.)	8.6 kg (19 lb.)
100 to 240 V ; 50 to 60 Hz	100 to 240 V ; 50 to 60 Hz
	(5 years)  Dual silicon photodiodes  190 to 1100 nm ±1.0 nm ±0.5 nm 11,000 nm/min 10 to 4,200 nm/min 0.2, 0.5, 1.0, 2.0, 3.0, 5.0 nm  Absorbance, % transmittance, concentration -0.5 to 5.0 A; -1.5 to 125 %T; ±9999 C Up to 3.5 A at 260 nm ±0.005 A at 1.0 A, <0.00025 at 0.0 A <0.00050 at 1.0 A, <0.00080 at 2.0 A RMS at 260 nm <0.0005 A/hr  <0.08 %T at 220 nm and 340 nm, <0.1 %T at 340 nm and 400 nm, <1.0 %T at 198 nm  Graphical with LCD backlight— 9.7 x 7.1 cm (3.8 x 2.8 in)  Sealed membrane with tactile response keys  USB type A port for USB stick (front panel), USB type B port for computer (rear panel) USB type A port for printer (rear panel) 30 W x 40 D x 25 H cm (11.8 x 15.7 x 9.8 in)  8.6 kg (19 lb.)



Cat. No.	Description
AQ8000	AquaMate 8000 UV-Vis Spectrophotometer, includes methods on USB memory stick, 6-position cell holder, 3-position cell holder, 1-position cell holder, user documentation, dust cover, USB cable, and 110 V and 220 V power cords
AQ7000	AquaMate 7000 Vis Spectrophotometer, includes methods on USB memory stick, 3-position cell holder, user documentation, dust cover, USB cable, and 110 V and 220 V power cords
AQ006C	AquaMate 6-position cell holder
AQ003C	AquaMate 3-position cell holder
AQ001C	AquaMate 1-position cell holder
AQOUSB	AquaMate methods, USB memory stick
AQCHNV	AquaMate power cord, China, Australia, New Zealand plug
AQ240V	AquaMate power cord, 240 V UK, Singapore plug
AQ220V	AquaMate power cord, 220 V Euro plug
AQ110V	AquaMate power cord, 110 V US, Japan plug
AC2V24	24 mm round vials, 12 pack

Note: When ordering the AQ8000 or AQ7000 instruments, the AQ240V and AQCHNV power cords need to be ordered separately.

### **Colorimeters**

#### **Orion AQ3700 Colorimeter**

Featuring tests for nitrogen, phosphate and COD

## This portable meter is the newest addition to the colorimetry line offering over 70 preprogrammed method options.

- Multi-parameter colorimeter with six wavelength options and wavelength auto-selection by preprogrammed method
- IP67 waterproof with 1000 data-point memory and long battery life
- Numerous preprogrammed tests for powder, tablet and liquid reagent chemistries, reaction tubes,
   COD digestion tubes and acid digestion tubes, including nitrogen and phosphate nutrient testing
- User interface available in selectable languages of English, French, German, Indonesian, Italian, Polish, Portuguese and Spanish

Preprogrammed with many colorimetry reagents and COD tests.



Easily create and store your own calibration curve for up to 10 new tests.

### **Orion AQ4000 Colorimeter**

Offers numerous preprogrammed tests for reagent chemistries

Take the guesswork out of sample preparation and measurement with the Auto-Test™ ampoules and the exclusive Auto-ID™ feature.

- Multi-parameter colorimeter with four wavelength options and wavelength auto-selection by preprogrammed method
- Portable and IP67 waterproof with 100 data-point memory and 2,500 hour average battery life
- Compatible with powder, tablet and liquid reagent chemistries, Auto-Test ampoules and COD digestion tubes
- Auto-Test ampoules contain pre-measured liquid reagents and automatically identify the species to be measured, select the wavelength and initiate the method
- · Computer interface for data transfer using RS232 port



Field case keeps the meter and test supplies always at the ready for testing.

#### **Orion AQ3070 Colorimeter**

Measures free and total chlorine for EPA reporting

## Designed with expanded ranges for free and total chlorine, it gives you a real number to quickly process your results.

- Five-parameter colorimeter with one wavelength
- Portable and IP67 waterproof with long battery life
- Preprogrammed reagent tests for free chlorine, total chlorine, chorine dioxide, cyanuric acid and pH (5.9 to 8.2)
- U.S. EPA approved methods for free and total chlorine in drinking water, wastewater and chlorine dioxide in drinking water



AQ3700 Colorimeter	Specifications
Incident Light Source	6 light emitting diodes (LED)
Wavelengths	430, 530, 560, 580, 610, 660 nm
Wavelength Accuracy	+/- 1nm
Photometric Accuracy	+/- 0.005 Abs
Sample Cell Compatibility	13mm, 16mm and 24 mm round
Power	4 AA batteries
Warranty	2 years

Cat. No.	Description
AQ3700	AQ3700 meter with 4 AA batteries, 24 mm vials (4), 16 mm vials (3), 16 mm vial adapter, 13 mm vial adapter, field case, user guide with test methods, tablet tampering stir rod and vial cleaning brush
AC2V16	Replacement 16 mm vials, 10 pack
AC2V24	Replacement 24 mm vials, 12 pack
AC3ROD	Stir rod, 10 pack
AC3CBR	Vial cleaning brush, 5 pack
COD165	Thermoreactor for digestion methods, 165°C temperature control
CODS01	1000 ppm COD standard, 475 mL
CODS10	10000 ppm COD standard, 475 mL

AQ4000 Colorimeter	Specifications
Incident Light Source	4 light emitting diodes (LED)
Wavelengths	420, 520, 580, 610 nm
Wavelength Accuracy	+/- 2nm
Photometric Accuracy	+/- 0.005 A
Sample Cell Compatibility	13mm, 16mm and 24 mm round
Power	4 AA batteries
Warranty	2 years

Cat. No.	Description
AQ4000	AQ4000 meter with 4 AA batteries, 24 mm vials, 16 mm vials, 16 mm vial adapter, 13 mm vial adapter, field case, user guide with test methods, tablet tampering stir rod and vial cleaning brush
AC2V16	Replacement 16 mm vials, 10 pack
AC2V24	Replacement 24 mm vials, 12 pack
AC3ROD	Stir rod, 10 pack
AC3CBR	Vial cleaning brush, 5 pack
AC4CBL	RS232 cable for data download and software update
AQ4ZER	AQUAfast zero kit
COD165	Thermoreactor for digestion methods, 165°C temperature control
CODS01	1000 ppm COD standard, 475 mL
CODS10	10000 ppm COD standard, 475 mL

AQ3070 Colorimeter	Specifications
Incident Light Source	1 light emitting diode (LED)
Wavelengths	525 nm
Wavelength Accuracy	+/- 2nm
Photometric Accuracy	+/- 0.0015 A
Sample Cell Compatibility	25 mm round
Power	4 AAA batteries
Warranty	2 years

Cat. No.	Description
AQ3070	AQ3070 meter with 4 AAA batteries, 25 mm vials (6), 100 free chlorine powder tests, 100 total chlorine powder tests, field case, user guide with test methods, tablet tampering stir rod and vial cleaning brush
AC3V25	Replacement 25 mm vials, 3 pack
AC3ROD	Stir rod, 10 pack
AC3CBR	Vial cleaning brush, 5 pack

### **Turbidity Meters**

#### **Orion AQ4500 Turbidity Meter**

All-in one capability, featuring both White and Infrared light sources

Includes a dual source LED to allow readings that comply with reporting requirements for both EPA and ISO 7027 methodologies.

- · U.S. EPA approved white light LED method for reporting
- ISO 7027 IR LED method for reporting
- Portable and IP67 waterproof with 100 data-point memory and 2,500 hour average battery life
- Orion AQ4500 Drinking Water and Wastewater Methods approved for U.S. EPA regulatory reporting
- · Computer interface for data transfer using RS232 port

The only meter you need for all your turbidity testing.



### **Orion AQ3010 Turbidity Meter**

Faster calibration with step-by-step prompts

Includes a field case with everything you need for easy storage and transport.

## Easily determine the clarity of your sample with a user-friendly interface, large display and 0 to 1000 NTU auto-ranging.

- ISO 7027 IR LED method for reporting
- · Employs Nephelometric principle of turbidity measurement
- Meets criteria specified in ISO 7027 and DIN 27027 standards
- · Portable and IP67 waterproof with long battery life
- · Easy vial indexing with continuous measurement mode
- · Simple interface and low cost of ownership



AQ4500 Turbidity Meter	Specifications
Incident Light Source	Dual Source - White Light LED and IR LED
Measurement Modes	EPA 180.1, ISO nephelometric, ISO absorbance, IR ratiometric, % transmittance, EPA GLI method 2, EBC (European Brewing Chemists), ASBC (American Society of Brewing Chemists)
Measurement Ranges	0 to 4000 NTU EPA 0 to 2000 NTU GLI range 0 to 40 NTU ISO-7027 0 to 150 FAU IR Ratio 0 to 4000 NTU EBC 0 to 24.5 ASBC 0 to 236
Resolution	0.01 (0 to 9.99 NTU), 0.1 (10 to 99.9), 1 (100 to 4000)
Sample Cell Compatibility	24 mm round
Power	4 AA batteries
Warranty	2 years

Cat. No.	Description
AQ4500	AQ4500 meter with 4 AA batteries, primary standard calibration kit, 24 mm turbidity vials, field case, user guide, silicone oil and cloth
AC2T24	Replacement 24 mm turbidity vials, 12 pack
AC45ST	Primary turbidity standard calibration, set of 5
AC45FZ	4000 NTU Formazin turbidity standard, 475 mL
AC45S1	Silicon oil and cloth
AC3CBR	Vial cleaning brush, 5 pack
AC4CBL	RS232 cable for data download and software update

AQ3010 Turbidity Meter	Specifications
Incident Light Source	IR LED
Measurement Modes	ISO nephelometric
Measurement Ranges	0.01 to 1000 NTU
Resolution	0.01 (0.01 to 19.99 NTU), 0.1 (20 to 99.9), 1 (100 to 1000)
Sample Cell Compatibility	25 mm round
Power	4 AAA batteries
Warranty	3 years

Cat. No.	Description
AQ3010	AQ3010 meter with 4 AAA batteries, EPA approved primary standard kit, 25 mm turbidity vials (7), field case, user guide, silicone oil and cloth
AC3V25	Replacement 25 mm vials, 3 pack
AC301S	EPA approved and ISO accepted polymer-based primary turbidity standard kit, set of 4
AC3SIL	Silicon oil and cloth
AC3CBR	Vial cleaning brush, 5 pack

Visit our online library at <a href="www.thermoscientific.com/WAI-Library">www.thermoscientific.com/WAI-Library</a> to review colorimetry and turbidity approvals and our newly approved Orion AQ4500 Drinking Water and Wastewater turbidity methods that are approved for EPA compliant reporting. We have posted application notes and briefs to assist you with testing.

### **Thermo Scientific Orion AQUAfast Reagent Chemistries**

Parameter	Cat. Number	Description	Reagent Type	Range	No. of Tests	AQ8000	AQ7000	AQ4000	AQ3700	AQ3070
A II I' II	AC2002	Alkalinity-M, Acid/Indicator Method	Tablet	5 - 200 mg/L	100	•	/•	/ <b>.</b>	•	
Alkalinity	AC3002P	Alkalinity-P, Acid/Indicator Method	Tablet	5 - 500 mg/L	100	• /	•		•	
	AC2027	Aluminum, Eriochrome Cyanine R Method	Tablet	0.01 - 0.3 mg/L	50	•	• /	•	•	
Aluminum	AC4027	Aluminum, Eriochrome Cyanine R Method	Ampoule	0.04 - 0.25 mg/L	30			•		
	AC4P27	Aluminum, Eriochrome Cyanine R Method	Powder & Liquid	0.01 - 0.25 mg/L	100	•	/•/		/•	
	AC2012	Ammonia as Nitrogen (N), Indophenole/Phenate Method	Tablet	0.02 - 1 mg/L	50	•	•	•/	•	
	AC4010	Ammonia as Nitrogen (N), Ultra Low Range, Salicylate Method	Ampoule	0.2 - 30 mg/L	30			/•		
Ammonia	AC4011	Ammonia as Nitrogen (N), High Range, Nesslerization Method	Ampoule	1 - 14 mg/L	30			•		
	AC4012	Ammonia as Nitrogen (N), Low Range, Nesslerization Method	Ampoule	0.5 - 7 mg/L	30			•		
	AC4P12	Ammonia as Nitrogen (N), Salicylate Method	Powder	0.01 - 0.8 mg/L	100	•	•		•	
	ACR011	Ammonia as Nitrogen (N), High Range, Salicylate Method	Reaction Tube	1 - 50 mg/L	50	•	•		•	
	ACR012	Ammonia as Nitrogen (N), Low Range, Salicylate Method	Reaction Tube	0.02 - 2.5 mg/L	50	•	•		•	
Bromine	AC2035	Bromine, DPD Method	Tablet	0.05 - 13 mg/L	100	•	•		•	
Chloride	AC2017	Chloride, Silver Nitrate/Turbidity Method	Tablet	0.5 - 25 mg/L	50	•	•	•	•	
Gilloriae	AC4017	Chloride, Ferric Thiocyanate Method	Ampoule	2.5 - 40 mg/L	30			•		
	AC2070	Chlorine, Free & Total, DPD Method	Tablet	0.01 - 6 mg/L	100	•	•	•	•	•
	AC2071	Chlorine, Free, DPD Method	Tablet	0.01 - 6 mg/L	100	•	•	•	•	
Chlorine	AC2072	Chlorine, Total, DPD Method	Tablet	0.01 - 6 mg/L	100	•	•	•	•	
	AC3072	Chlorine, Total, High Range, KI / Acid Method	Tablet	5 - 200 mg/L	100	•	•		•	
	AC4070	Chlorine, Free & Total, DPD Method	Ampoule	0.4 - 5 mg/L	30			•		•
	AC4P71	Chlorine, Free, DPD Method	Powder	0.02 - 2 mg/L	100	•	•	•	•	
	AC4P72	Chlorine, Total, DPD Method	Powder	0.02 - 2 mg/L	100	•	•	•	•	•
Chlorine	AC2099	Chlorine Dioxide, DPD Method	Tablet	0.05 - 11 mg/L 100 • •	•	•	•			
Dioxide	AC4099	Chlorine Dioxide, DPD Method	Ampoule	0.8 - 11 mg/L	30			•		
	CODL00	COD, Low Range, Dichromate Reactor Digestion Method	Digestion Tube	0 - 150 mg/L	25	•	•	•	•	
COD	CODH00	COD, Mid Range, Dichromate Reactor Digestion Method	Digestion Tube	0 - 1500 mg/L	25	•	•	•	•	
COD	CODHP0	COD, High Range, Dichromate Reactor Digestion Method	Digestion Tube	0 - 15000 mg/L	25	•	•	•	•	
	AC2029	Copper, Free & Total, Biquinoline Method	Tablet	0.05 - 5 mg/L	50	•	•	•	•	
Copper	AC2065	Copper, Zincon Method	Tablet	0.02 - 1 mg/L	50	•	•	•	•	
	AC4029	Copper, Soluble, Bathocuproine Method	Ampoule	0.5 - 12 mg/L	30			•		
	AC4P29	Copper, Free, Bicinchoninate Method	Powder	0.05 - 5 mg/L	100	•	•	•	•	
Cyanide	AC4006	Cyanide, Free, Isonicotinic-Barbituric Acid Method	Ampoule	0.04 - 0.4 mg/L	30			•		
Cyanuric Acid	AC2098	Cyanuric Acid, Melamine Method	Tablet	5 - 90 mg/L	100	•	•		•	•
Fluoride	AC2009	Fluoride, SPADNS Kit Method	Liquid	0.05 - 2 mg/L	50	•	•	•	•	
	AC3032C	Hardness, Calcium, High Range, Murexide Method	Tablet	50 - 900 mg/L	100				•	
Hardness	AC3032C2	Hardness, Calcium, Low Range, Murexide Method	Tablet	0 - 500 mg/L	100				•	
	AC3032T	Hardness, Total, Metallphthalein Method	Tablet	2 - 50 mg/L	100	•	•		•	
Hydrazine	AC2030	Hydrazine, Dimethylamino-benzaldehyde Method	Powder	0.05 - 0.5 mg/L	100	•	•	•	•	
Iron	AC2078	Iron, Low Range, III, Soluble, TPTZ Method	Tablet	0.01 - 1 mg/L	100	•	•	•	•	
	AC4078	Iron, Total & Soluble, Phenanthroline Method	Ampoule	0.2 - 6 mg/L	30			•		
	AC4P78	Iron, II & III, Soluble, 1,10-Phenanthroline Method	Powder	0.02 - 3 mg/L	100	•	•	•	•	
	AC4P79	Iron, Total, TPTZ Method	Powder	0.02 - 1.8 mg/L	100	•	•	•	•	

Parameter	Cat. Number	Description	Reagent Type	Range	No. of Tests	AQ8000	AQ7000	AQ4000	AQ3700	AQ3070
Manganese	AC2055	Manganese, Formaldoxime Method	Tablet	0.2 - 4 mg/L	50	•	•	•	•	
	AC4055	Manganese, Periodate Method	Ampoule	2 - 30 mg/L	30			•		
	AC4P54	Manganese, Low Range, PAN Method	Powder & Liquid	0.01 - 0.7 mg/L	100	•	•		•	
	AC4P55	Manganese, High Range, Periodate Oxidation Method	Powder	0.1 - 18 mg/L	100	•	•	•	•	
Molybdate/ Molybdenum	AC4P42	Molybdate / Molybdenum, Mercaptoacetic Acid Method	Powder	0.3 - 40 mg/L	100	•	•	•	•	
Nitrate	AC2007	Nitrate as Nitrogen (N), Zinc Reduction Method	Tablet	1 - 40 mg/L	50			•		
	ACR007	Nitrate as Nitrogen (N), Chromotropic Acid Method	Reaction Tube	1 - 30 mg/L	50	•	•		•	
	AC4004	Nitrate as Nitrogen (N), Low Range, Cadmium reduction Method	Ampoule	0.2 - 1.5 mg/L	30			•		
	AC4005	Nitrate as Nitrogen (N), Cadmium Reduction Method	Ampoule	0.4 - 3 mg/L	30			•		
	AC4007	Nitrate, Cadmium Reduction Method	Ampoule	5 - 50 mg/L	30			•		
Nitrite	AC2046	Nitrite as Nitrogen (N), Diazotization (Azo) Method	Tablet	0.01 - 0.5 mg/L	100	•	•	•	•	
	AC4P46	Nitrite as Nitrogen (N), Low Range, Diazotization (Azo) Method	Powder	0.01 - 0.3 mg/L	100	•	•	•	•	
	AC4046	Nitrite as Nitrogen (N), Azo Dye Formation Method	Ampoule	0.08 - 0.8 mg/L	30			•		
Nitrogen, Total	ACD004	Nitrogen, Total, Low Range, Persulfate Digestion Method	Digestion Tube	0.5 - 25 mg/L	50	•	•		•	
	ACD007	Nitrogen, Total, High Range, Persulfate Digestion Method	Digestion Tube	5 - 150 mg/L	50	•	•		•	
Oxygen	AC4008	Oxygen, Indigo Carmine Method	Ampoule	2 - 15 mg/L	30			•		
Ozone	AC2048	Ozone, Indigo Blue Method	Tablet	0.05 - 0.5 mg/L	100	•	•			
	AC4048	Ozone, DPD Method	Ampoule	0.2 - 5 mg/L	30			•		
рН	AC2001	pH, Phenol Red Method	Tablet	6.5 - 8.4	100	•	•	•	•	
	AC3001	pH, Phenol Red Method	Liquid	6.5 - 8.4	30	•	•		•	•
	AC3001TB	pH, Thymol Blue Method	Tablet	8.0 - 9.6	100				•	
	AC2095	Phosphate, Ortho, Low Range, Phosphomolybdic Acid/ Ascorbic Acid Method	Tablet	0.05 - 4 mg/L	50	•	•	•	•	
	AC2096	Phosphate, Ortho, High Range, Vanadomolybdate Method	Tablet	1 - 80 mg/L	50	•	•	•	•	
	AC4095	Phosphate, Ortho, Stannous Chloride Method	Ampoule	0.3 - 8 mg/L	30			•		
Phosphate	AC4P95	Phosphate, Ortho, Ascorbic Acid Method	Powder	0.06 - 2.5 mg/L	100	•	•	•	•	
·	ACD095	Phosphate as Phosphorous (P), Total, Persulfate Digestion/Ascorbic Acid Method	Digestion Tube	0.02 - 1.1 mg/L	50	• /	•		•	
	ACD095AH	Phosphate as Phosphorous (P), Acid Hydrolyzable, Acid Digestion/Ascorbic Acid Method	Digestion Tube	0.02 - 1.6 mg/L	50	/•	•		•	
	ACR095	Phosphate, Ortho, Ascorbic Acid Method	Reaction Tube	0.06 - 5 mg/L	50		•		•	
Silica	AC2060	Silica, Silicomolybdate, Heteropoly Blue Method	Tablet	0.05 - 4 mg/L	50	•	•	<b>/•</b> )	•	
	AC2061	Silica, Silicomolybdate, Heteropoly Blue Method with Phosphate Removal	Tablet	0.05 - 4 mg/L	100	•	•/	•	•	
	AC4060	Silica, Heteropoly Blue Method	Ampoule	0.5 - 10 mg/L	30					
	AC4P60	Silica, High Range, Silicomolybdate Method	Powder	1 - 90 mg/L	100	•	•	^•	•	
Sodium Hypochlorite,	AC3072	Sodium Hypochlorite, Potassium Iodide Method	Tablet	0.2 - 16 %	100		/		•	$\overline{}$
	AC2082	Sulfate, Barium Sulfate/Turbidity Method	Tablet	5 - 200 mg/L	100			•	•^	
Sulfate	AC4082	Sulfate, Barium Sulfate/Turbidity Method	Ampoule	8 - 100 mg/L	30			•		
	AC4P82	Sulfate, Barium Sulfate/Turbidity Method	Powder	5 - 100 mg/L	100	•		•/	•	
Sulfide	AC2016	Sulfide, Methylene Blue Method	Tablet	0.04 - 0.5 mg/L	50	•	•		•	
	AC4016	Sulfide, Acid Soluble, Methylene Blue Method	Ampoule	0.2 - 3 mg/L	30			•		
Zinc	AC2065	Zinc, Zincon Method	Tablet	0.02 - 1.0 mg/L	50	•	•	•	•	
	AC4065	Zinc, Zincon Method	Ampoule	0.3 - 3 mg/L	30					

Many of the AQUAfast reagent chemistries use U.S. EPA approved methods for drinking water and/or wastewater. Visit www.thermoscientific.com/water for the most current list of U.S. EPA compliant reagent chemistry methods.

## Resources

for Electrochemistry and Water Analysis Equipment

#### **Thermo Scientific Orion Products**

Visit <u>www.thermoscientific.com/water</u> for additional information on spectrophotometry, colorimetry and turbidity products plus laboratory and field equipment for pH, ISE, conductivity and dissolved oxygen analysis

### Water Analysis Instruments Online Library

Visit <a href="www.thermoscientific.com/WAI-Library">www.thermoscientific.com/WAI-Library</a> to access product literature, user guides and manuals, instruction sheets and additional support files. For the most up-to-date MSDS and C of A files for Thermo Scientific Orion solutions, visit <a href="www.thermoscientific.com/waterMSDS">www.thermoscientific.com/waterMSDS</a>



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Water Analysis Instruments

North America Toll Free: 1-800-225-1480 Tel: 1-978-232-6000 info.water@thermo.com Netherlands

Tel: (31) 033-2463887 info.water.uk@thermo.com

China

Tel: (86) 21-68654588 wai.asia@thermofisher.com India

Tel: (91) 22-4157-8800 wai.asia@thermofisher.com

Singapore

Tel: (65) 6778-6876 wai.asia@thermofisher.com Japan

Tel: (81) 045-453-9175 wai.asia@thermofisher.com

Australia

Tel: (613) 9757-4300 in Australia (1300) 735-295 InfoWaterAU@thermofisher.com



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