



**Water Analysis Instruments**  
Thermo Scientific Orion AquaMate  
and AQUAfast Product Brochure



Reliable water analysis

**Precise & Affordable**

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

**Thermo**  
SCIENTIFIC

# 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 AquaMate 8000 UV-Vis or AquaMate 7000 Vis instrument
- 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™ AQUAfast™ Colorimeters and Turbidity Meters are accurate, dependable and easy to use, with handheld portability, a wide range of methods, optimum wavelengths, user-friendly displays, and easy calibration.

- Rugged, handheld portability and waterproof instruments for fieldwork convenience
- User-friendly interface for quick and easy results processing
- Compatibility with several test parameters and reagent types
- Methods comply with numerous regulatory requirements for drinking water and wastewater analysis

## 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 five year average lamp lifespan. Superior signal-to-noise performance and fast wavelength scanning technology allow high-quality spectral data to be acquired quickly and reliably.



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

Using optical measurement, colorimeters measure the concentration of ions in water and turbidity meters determine the clarity of water due to particulate content.



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 and chemistries from additional leading reagent manufacturers. Methods are stored on the USB memory stick, so they can be added or removed from the instrument as needed. The included 3-position turret allows a variety of vial sizes to be used with adjustable 13-25mm round vial holder, 20-50mm rectangular vial holder and 10 mm square vial holder. AquaMate Spectrophotometers also utilize performance verification tests to ensure wavelength accuracy and instrument functionality.



## AquaMate 7000 Vis Spectrophotometer

- 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 that is always ready with no required warm up and average five year lifespan to reduce maintenance costs
- 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 Spectrophotometer** 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 or create your own methods, so virtually any brand of reagent can be used.



Specifications	AquaMate 8000 UV-Vis Spectrophotometer	AquaMate 7000 Vis Spectrophotometer
<b>Optical Design</b>	Dual beam – internal reference detector	Single beam
<b>Spectral Bandwidth</b>	1.8 nm	5.0 nm
<b>Light Source (Typical Lifetime)</b>	Xenon flash lamp (5 years)	Tungsten-halogen lamp (1000 hours)
<b>Detector</b>	Dual silicon photodiodes	Silicon photodiode
<b>Wavelength</b> Range Accuracy Repeatability Slew Speed Scanning Speed Data Interval	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
<b>Photometric</b> Measurement Modes Range Linearity Accuracy Noise Drift	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
<b>Stray Light</b>	<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
<b>Display</b>	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)
<b>Keypad</b>	Sealed membrane with tactile response keys	Sealed membrane with tactile response keys
<b>Connectivity</b>	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)
<b>Dimensions</b>	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)
<b>Weight</b>	8.6 kg (19 lb.)	8.6 kg (19 lb.)
<b>Power Requirements</b>	100 to 240 V ; 50 to 60 Hz	100 to 240 V ; 50 to 60 Hz



Cat. No.	Description
<b>AQ8000</b>	AquaMate 8000 UV-Vis Spectrophotometer, includes methods on USB memory stick, 6-position turret, 3-position turret, 1-position turret, user documentation, dust cover, USB cable, and 110 V, 220 V, 240 V power cords
<b>AQ7000</b>	AquaMate 7000 Vis Spectrophotometer, includes methods on USB memory stick, 3-position turret, user documentation, dust cover, USB cable, and 110 V, 220 V, 240 V power cords
<b>AQ006C</b>	AquaMate 6-position vial holder turret for six 10 mm square vials
<b>AQ003C</b>	AquaMate 3-position vial holder turret for one adjustable 13-25 mm round vial, one adjustable 20-50 mm rectangular vial and one 10 mm square vial
<b>AQ001C</b>	AquaMate 1-position vial holder turret for one 10 mm square vial
<b>AQ100C</b>	AquaMate 1-position vial holder turret for one 100mm rectangular vial
<b>AQ7LMP</b>	AquaMate 7000 replacement Tungsten lamp in pre-aligned fixture
<b>AQ0USB</b>	AquaMate methods, USB memory stick
<b>AQCHNV</b>	AquaMate power cord, China, Australia, New Zealand plug
<b>AQ240V</b>	AquaMate power cord, 240 V UK, Singapore plug
<b>AQ220V</b>	AquaMate power cord, 220 V Euro plug
<b>AQ110V</b>	AquaMate power cord, 110 V US, Japan plug
<b>AC2V24</b>	24 mm round vials, 12 pack

Note: When ordering the AQ8000 or AQ7000 instruments, the AQCHNV power cord must be ordered separately.

# Colorimeters

## Thermo Scientific™ Orion™ AQ3700 Colorimeter

Featuring tests for nitrogen, phosphate and COD

**This portable meter is the newest addition to the colorimetry line offering over 90 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 digestion tests.

## Thermo Scientific™ 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 on the meter
- Computer interface for data transfer using RS232 port



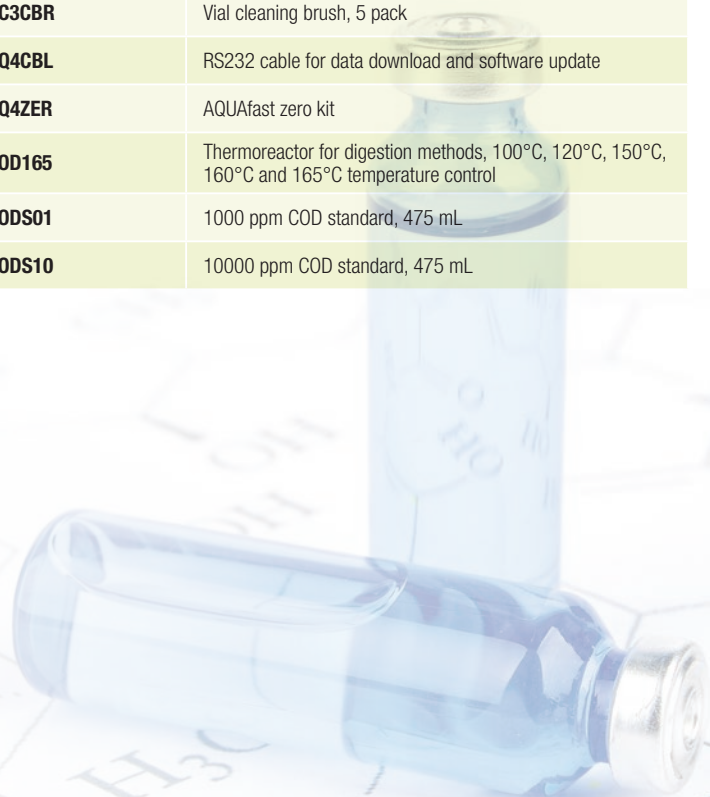
Easily create and store your own calibration curve for up to 10 new tests.

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

Cat. No.	Description
<b>AQ3700</b>	AQ3700 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
<b>AC2V16</b>	Replacement 16 mm vials, 10 pack
<b>AC2V24</b>	Replacement 24 mm vials, 12 pack
<b>AC3SR24</b>	Sealing rings for 24 mm vials, 12 pack
<b>AC3VSK</b>	Verification standard kit for AQ3700 colorimeter, set of 6
<b>AQ37IRIM</b>	IRIM data transfer device for AQ3700 colorimeter
<b>AC3CBR</b>	Vial cleaning brush, 5 pack
<b>COD165</b>	Thermoreactor for digestion methods, 100°C, 120°C, 150°C, 160°C and 165°C temperature control
<b>CODS01</b>	1000 ppm COD standard, 475 mL
<b>CODS10</b>	10000 ppm COD standard, 475 mL

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

Cat. No.	Description
<b>AQ4000</b>	AQ4000 meter with 4 AA batteries, 16 mm vial, zero vial kit, 16 mm vial adapter, 13 mm vial adapter, field case, user guide, tablet tampering stir rod and vial cleaning brush
<b>AC2V16</b>	Replacement 16 mm vials, 10 pack
<b>AC2V24</b>	Replacement 24 mm vials, 12 pack
<b>AC3CBR</b>	Vial cleaning brush, 5 pack
<b>AQ4CBL</b>	RS232 cable for data download and software update
<b>AQ4ZER</b>	AQUAfast zero kit
<b>COD165</b>	Thermoreactor for digestion methods, 100°C, 120°C, 150°C, 160°C and 165°C temperature control
<b>CODS01</b>	1000 ppm COD standard, 475 mL
<b>CODS10</b>	10000 ppm COD standard, 475 mL



# Turbidity Meters

## Thermo Scientific™ 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 180.1 and ISO 7027 methods.**

- U.S. EPA approved white light LED 180.1 method for reporting turbidity
- ISO 7027 IR LED method for reporting turbidity
- 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.

## Thermo Scientific™ Orion™ AQ3010 Turbidity Meter

Faster calibration with step-by-step prompts

**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



Includes a field case for easy storage and transport.





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

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

Cat. No.	Description
<b>AQ4500</b>	AQ4500 meter with 4 AA batteries, primary standard calibration kit, 24 mm turbidity vials, field case, user guide, silicone oil and cloth
<b>AC2T24</b>	Replacement 24 mm turbidity vials, 12 pack
<b>AC45ST</b>	Primary turbidity standard calibration, set of 5
<b>AC45FZ</b>	4000 NTU Formazin turbidity standard, 475 mL
<b>AC45S1</b>	Silicon oil and cloth
<b>AC3CBR</b>	Vial cleaning brush, 5 pack
<b>AQ4CBL</b>	RS232 cable for data download and software update

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

Visit our online library at [www.thermoscientific.com/WAI-Library](http://www.thermoscientific.com/WAI-Library) to review colorimetry and turbidity approvals and our 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
Alkalinity	AC2002	Alkalinity-M, Acid/Indicator Method	Tablet	5 - 200 mg/L	100	•	•	•	•
	AC3002P	Alkalinity-P, Acid/Indicator Method	Tablet	5 - 300 mg/L	100	•	•		•
Aluminum	AC2027	Aluminum, Eriochrome Cyanine R Method	Tablet	0.01 - 0.3 mg/L	50	•	•	•	•
	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	•	•		•
Ammonia	AC2012	Ammonia as Nitrogen (N), Indophenol Blue 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			•	
	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	•	•		•
Boron	AC3089	Boron, Azomethine Method	Tablet	0.1 - 2 mg/L	100				•
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	•	•	•	•
	AC4017	Chloride, Ferric Thiocyanate Method	Ampoule	2.5 - 40 mg/L	30			•	
Chlorine	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	•	•	•	•
	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 Dioxide	AC2099	Chlorine Dioxide, DPD Method	Tablet	0.02 - 11 mg/L	100	•	•		•
	AC4099	Chlorine Dioxide, DPD Method	Ampoule	0.8 - 11 mg/L	30			•	
COD	CODL00	COD, Low Range, Dichromate Digestion Method	Digestion Tube	0 - 150 mg/L	25	•	•	•	•
	CODH00	COD, Mid Range, Dichromate Digestion Method	Digestion Tube	0 - 1500 mg/L	25	•	•	•	•
	CODHP0	COD, High Range, Dichromate Digestion Method	Digestion Tube	0 - 15000 mg/L	25	•	•	•	•
Color	----	Color, Pt-Co Scale, Direct Reading	----	0 - 500 Pt-Co units	----	•	•		•
Copper	AC2029	Copper, Free & Total, Biquinoline Method	Tablet	0.05 - 5 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	AC4P06	Cyanide, Pyridinebarbituric Acid Method	Powder & Liquid	0.01 - 0.5 mg/L	100				•
	AC4006	Cyanide, Isonicotinic-Barbituric Acid Method	Ampoule	0.04 - 0.4 mg/L	30			•	
Cyanuric Acid	AC2098	Cyanuric Acid, Melamine Method	Tablet	0 - 160 mg/L	100	•	•		•
DEHA	AC3088	DEHA, PPST Method	Tablet & Liquid	0.02 - 0.5 mg/L	100				•
	AC4P88	DEHA, PPST Method	Powder & Liquid	0.02 - 0.5 mg/L	100				•
Fluoride	AC2009	Fluoride, SPADNS Kit Method	Liquid	0.05 - 2 mg/L	50	•	•	•	•
Hardness	AC3032C	Hardness, Calcium, High Range, Murexide Method	Tablet	50 - 900 mg/L	100				•
	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	AC3030LQ	Hydrazine, 4-(Dimethyl-amino)-Benzaldehyde Method	Liquid	0.005 - 0.6 mg/L	50				•
	AC2030	Hydrazine, 4-(Dimethyl-amino)-Benzaldehyde Method	Powder	0.05 - 0.5 mg/L	30	•	•	•	•
Hydrogen Peroxide	AC3069	Hydrogen Peroxide, DPD/Catalyst Method	Tablet	0.03 - 3 mg/L	100				•
Iron	AC2078	Iron (II & III), PPST Method	Tablet	0.02 - 1 mg/L	100	•	•	•	•
	AC4078	Iron, Total & Soluble, Phenanthroline Method	Ampoule	0.2 - 6 mg/L	30			•	
	AC4P78	Iron, Ferro, 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
<b>Manganese</b>	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 & Liquid	0.1 - 18 mg/L	100	•	•	•	•
<b>Molybdate</b>	AC4P42	Molybdate / Molybdenum, Mercaptoacetic Acid Method	Powder	0.5 - 66 mg/L	100	•	•	•	•
<b>Nitrate</b>	AC2007	Nitrate as Nitrogen (N), Zinc Reduction Method	Tablet & Powder	0.08 - 1 mg/L	50			•	•
	ACR007	Nitrate as Nitrogen (N), Chromotropic Acid Method	Reaction Tube	1 - 30 mg/L	50	•	•		•
	AC4004	Nitrate as Nitrogen (N), 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			•	
<b>Nitrite</b>	AC2046	Nitrite as Nitrogen (N), N-(1-Naphthyl)-Ethylenediamine Method	Tablet	0.01 - 0.5 mg/L	100	•	•	•	•
	AC4P46	Nitrite as Nitrogen (N), Diazotization (Azo) Method	Powder	0.01 - 0.3 mg/L	100	•	•	•	•
	AC4046	Nitrite as Nitrogen (N), Diazotization (Azo) Method	Ampoule	0.08 - 0.8 mg/L	30			•	
<b>Nitrogen, Total</b>	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	•	•		•
<b>Oxygen</b>	AC4008	Oxygen, Indigo Carmine Method	Ampoule	2 - 15 mg/L	30			•	
<b>Ozone</b>	AC3048	Ozone, DPD/Glycine Method	Tablet	0.02 - 2 mg/L	100	•	•		•
	AC4048	Ozone, DPD Method	Ampoule	0.2 - 5 mg/L	30			•	
<b>pH</b>	AC2001	pH, Phenol Red Method	Tablet	6.5 - 8.4	100	•	•	•	•
	AC3001	pH, Phenol Red Method	Liquid	6.5 - 8.4	30	•	•		•
	AC3001BP	pH, Bromocresol Purple Method	Tablet	5.2 - 6.8	100				•
	AC3001TB	pH, Thymol Blue Method	Tablet	8.0 - 9.6	100				•
<b>Phosphate</b>	AC2095-WA	Phosphate, Ortho, Phosphomolybdic Acid/Ascorbic Acid Method	Tablet	0.05 - 4 mg/L	50	•	•	•	•
	AC2096	Phosphate, Ortho, Vanadomolybdate Method	Tablet	1 - 80 mg/L	50	•	•	•	•
	AC4095	Phosphate, Ortho, Stannous Chloride Method	Ampoule	0.3 - 8 mg/L	30			•	
	AC4P95	Phosphate, Ortho, Phosphomolybdenum/Ascorbic Acid Method	Powder	0.06 - 2.5 mg/L	100	•	•	•	•
	ACD095	Phosphate as P, Total, Persulfate Digestion/Ascorbic Acid Method	Digestion Tube	0.02 - 1.1 mg/L	50	•	•		•
	ACD095AH	Phosphate as P, Acid Hydrolyzable, Acid Digestion/Ascorbic Acid Method	Digestion Tube	0.02 - 1.6 mg/L	50	•	•		•
	ACR095	Phosphate, Ortho, Phosphomolybdenum/Ascorbic Acid Method	Reaction Tube	0.06 - 5 mg/L	50	•	•		•
<b>Potassium</b>	AC3019	Potassium, Tetraphenylborate-Turbidity Method	Tablet	0.7 - 12 mg/L	100				•
<b>Silica</b>	AC2060	Silica, Silicomolybdate, Heteropoly Blue Method	Tablet	0.05 - 4 mg/L	50	•	•	•	•
	AC2061	Phosphate Removal for AC2060 Method	Tablet	-----	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	•	•	•	•
<b>Sodium Hypochlorite</b>	AC3072	Sodium Hypochlorite, Potassium Iodide Method	Tablet	0.2 - 16 %	100				•
<b>Sulfate</b>	AC2082	Sulfate, Barium Sulfate/Turbidity Method	Tablet	5 - 100 mg/L	100			•	•
	AC4082	Sulfate, Barium Sulfate/Turbidity Method	Ampoule	8 - 100 mg/L	30			•	
	AC4P82	Sulfate, Barium Sulfate/Turbidity Method	Powder	5 - 100 mg/L	100	•	•	•	•
<b>Sulfide</b>	AC2016	Sulfide, DPD/Catalyst Method	Tablet	0.04 - 0.5 mg/L	50	•	•	•	•
	AC4016	Sulfide, Acid Soluble, Methylene Blue Method	Ampoule	0.2 - 3 mg/L	30			•	
<b>Zinc</b>	AC2065	Zinc, Zincon Method	Tablet	0.02 - 1 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](http://www.thermoscientific.com/water) for the most current list of U.S. EPA compliant reagent chemistry methods.

A dynamic background image showing water splashing and creating numerous bubbles, with a color palette ranging from light blue to deep blue.

# Resources

## for Electrochemistry and Water Analysis Equipment

### **Thermo Scientific Orion Products**

Visit [www.thermoscientific.com/water](http://www.thermoscientific.com/water) for additional information on spectrophotometry, colorimetry and turbidity products plus laboratory and field equipment for pH, ISE, conductivity and dissolved oxygen analysis

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#### Water Analysis Instruments

**North America**  
Toll Free: 1-800-225-1480  
Tel: 1-978-232-6000  
[info.water@thermofisher.com](mailto:info.water@thermofisher.com)

**Netherlands**  
Tel: (31) 020-4936270  
[info.water.uk@thermofisher.com](mailto:info.water.uk@thermofisher.com)

**India**  
Tel: (91) 22-4157-8800  
[wai.asia@thermofisher.com](mailto:wai.asia@thermofisher.com)

**Japan**  
Tel: (81) 045-453-9175  
[wai.asia@thermofisher.com](mailto:wai.asia@thermofisher.com)

**China**  
Tel: (86) 21-68654588  
[wai.asia@thermofisher.com](mailto:wai.asia@thermofisher.com)

**Singapore**  
Tel: (65) 6778-6876  
[wai.asia@thermofisher.com](mailto:wai.asia@thermofisher.com)

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

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