

The Thermo Scientific Orion AQ3700 AQUAfast colorimeter offers a broad range of preprogrammed methods for all of your testing needs. The software prompts you through the test steps, ensuring conformity and consistency in gathering your important test results.

## Thermo Scientific Orion AQ3700 AQUAfast Colorimeter



### Markets

- Wastewater
- Drinking water
- Nutrient monitoring
- Environmental testing
- Food and Beverage
- Industrial Applications

### Thermo Scientific Orion AQ3700 Colorimeter

The new Orion AQ3700's benefits can be seen in treating and monitoring effluent. The benefit of efficient operation is important to all production facilities, no matter what they make. By optimizing the process in wastewater treatment, the dirty water can move to the next stage of the process at the perfect time – not prior to the being fully treated and not overtreated. Overtreatment wastes chemicals and slows down the processing which requires more energy to maintain the process. Undertreatment can cause problems if the discharge exceeds the permitted levels. Typically, total nitrogen and total phosphate testing required very long reflux digestion processes with expensive glassware. Now the results can be ready in an hour or so using persulfate digestion tube methods.

This greatly improves the turnaround time for the results. These in-process checks of the nutrient removal status can ensure you are on track for the final levels you need to attain plus give you timely information to correct the process if needed. In many locations, these tests are now required. With the Orion AQ3700 and its many options testing for various nitrogen and phosphate forms, you can help reduce the harmful effects of algae blooms and ecosystem disruption in your world.

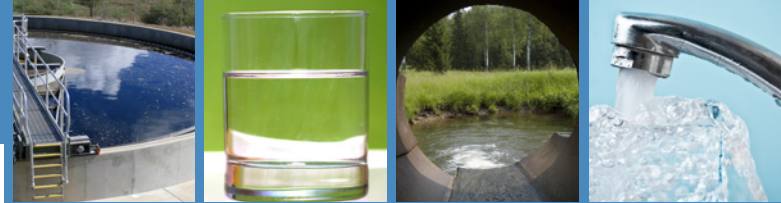
With the AQ3700 meter, Total Nitrogen and Total Phosphate Tube Digestion tests are now available from Thermo Scientific. If you are already testing COD levels, you can quickly add these important tests and start reaping the benefits!

## Test Reagents for the Orion AQ3700

The Orion AQ3700 colorimeter offers many new parameters and test ranges. Select the parameter you need to measure, then the measurement range. Our EPA approved methods for Drinking Water and Wastewater are noted. Additionally there are other

Orion methods that use EPA-approved test methodology and are acceptable for EPA reporting. These are noted as EPA Equivalent for the sample type. The preprogrammed tests make it easy to get quick, accurate results.

Parameter	Reagent Form	Catalog Number	Description	Range	Number of Tests	EPA Approved Methods
Alkalinity	Tablet	AC2002	AQUAfast II Alkalinity-m , Total	5.0 - 200 mg/L CaCO <sub>3</sub>	100	
	Tablet	AC2002	AQUAfast Acid Demand at pH 4.3	0.1-4 mmol/L	100	
	Tablet <b>NEW</b>	AC3002P	AQUAfast Alkalinity-p	5-500 mg/L CaCO <sub>3</sub>	100	
Aluminum	Tablet	AC2027	AQUAfast II Aluminum	0.05 - 0.30 mg/L	50	WW Equivalent
	Powder <b>NEW</b>	AC4P27	AQUAfast Aluminum Powder Pack	0.01-0.25 mg/L	100	WW Equivalent
Ammonia (Nitrogen)	Tablet	AC2012	AQUAfast II Ammonia, as Nitrogen	0.05 - 1.0; 0.5 - 10.0 mg/L	50	
	Powder <b>NEW</b>	AC4P12	AQUAfast Ammonia-Nitrogen, Powder	0.1 - 0.50 mg/L	100	
	Liquid <b>NEW</b>	ACD012	AQUAfast Ammonia Thermal Digestion Test	0.02-2.5 mg/L	50	
	Liquid <b>NEW</b>	ACD011	AQUAfast Ammonia Thermal Digestion Test	1-50 mg/L	50	
Boron	Tablet <b>NEW</b>	AC3089	AQUAfast Boron	0.1-2 mg/L	100	
Bromine	Ampoule	AC4035NL	AQUAfast IV Bromine	0.75 - 9.0 mg/L	30	
	Tablet	AC2035	AQUAfast II Bromine	0.1 - 13.5 mg/L	100	
Chloride	Tablet	AC2017	AQUAfast II Chloride	0.5 - 25 mg/L	50	
Chlorine	Powder	AC4P71	AQUAfast Chlorine,Free, DPD, Powder Packets, EPA-approved Method	0.03 - 2.00 mg/L	100	DW
	Tablet	AC2071	AQUAfast II Chlorine, DPD, Free Only	0.05 - 6.0 mg/L	100	DW
	Tablet	AC2070	AQUAfast II Chlorine, Free and Total, EPA-approved Method	0.05 - 6.0 mg/L	50 ea	DW - Free & Total WW -Total
	Liquid <b>NEW</b>	AC2070LQ	AQUAfast Chlorine Liquid Kit	0.2 - 4 mg/L	30	DW
	Powder	AC4P72	AQUAfast Chlorine,Total, DPD, Powder Packets, EPA-approved Method	0.03 - 2.00 mg/L	100	DW & WW
	Tablet	AC2072	AQUAfast II Chlorine, Total, EPA-approved Method	0.05 - 6.0 mg/L	50	DW & WW
	Tablet <b>NEW</b>	AC3072	AQUAfast Total Chlorine HR Tablet	5 -200 mg/L	100	DW & WW Equivalent
Chlorine Dioxide	Tablet	AC2099	AQUAfast II Chlorine Dioxide	0.04 - 2.8 mg/L	100	
COD	Liquid	CODL00	AQUAfast COD, Low Range, EPA-approved Method	0-150 mg/L	25	WW
	Liquid	CODH00	AQUAfast COD, High Range, EPA-approved Method	0-1500 mg/L	25	WW
	Liquid	CODHP0	AQUAfast COD, Very High Range	0-15000 mg/L	25	WW Equivalent
Copper	Powder	AC4P29	AQUAfast Copper, Bicinchoninate, Powder	0.05 - 5.00 mg/L	100	WW Equivalent
	Tablet	AC2065	AQUAfast II Zinc/Copper	0.02 - 1.0 mg/L	50	
	Tablet	AC2029	AQUAfast II Copper	0.05 - 5.0 mg/L	50	
Cyanide	Liquid	AC4P06	AQUAfast Cyanide Powder and Liquid	0.01 - 0.5 mg/L	200	DW & WW Equivalent
Cyanuric Acid	Tablet	AC2098	AQUAfast II Cyanuric Acid	5 - 90 mg/L	100	
DEHA	Liquid <b>NEW</b>	AC3088	AQUAfast DEHA Tablet and Liquid	0.02 -0.5 mg/L	100	
	Liquid <b>NEW</b>	AC4P88	AQUAfast DEHA Powder and Liquid	20 - 500 mg/L	100	
Fluoride	Liquid	AC2009	AQUAfast II Fluoride SPADNS Kit, EPA-approved Method	0.05 - 20 mg/L	50	DW & WW
Hardness	Tablet <b>NEW</b>	AC3032C	AQUAfast Hardness Calcium Tablet	50 - 900mg/L	100	
	Tablet <b>NEW</b>	AC3032T	AQUAfast Hardness Total Tablet	2 - 50 mg/L	100	
	Tablet <b>NEW</b>	AC3032HR	AQUAfast Hardness Total HR Tablet	20 - 500 mg/L	100	
Hydrazine	Liquid <b>NEW</b>	AC3030LQ	AQUAfast Hydrazine Liquid	0.01 - 0.6 mg/L	50	
	Powder <b>NEW</b>	AC4P30	AQUAfast Hydrazine Powder	0.05 - 0.5 mg/L	100	
Hypochlorite	Tablet <b>NEW</b>	AC3073	AQUAfast Sodium Hypochlorite Tablet	0.2- 16 mg/L	100	
Iodine	Tablet <b>NEW</b>	AC3053	AQUAfast Iodine, Tablets	0.05 - 3.6 mg/L	100	



Parameter	Reagent Form	Catalog Number	Description	Range	Number of Tests	EPA Approved Methods
Iron	Powder	AC4P79	AQUAfast Iron Total TPTZ, Powder	0 - 1.80 mg/L	100	
	Powder	AC4P78	AQUAfast Iron Total Ferro, Powder	0 - 3.00 mg/L	100	
	Tablet	AC2078	AQUAfast II Iron (II, III) Soluble, Tablet	0.02 - 1.0 ; 0.2 - 10 mg/L	100	
Manganese	Powder	AC4P55	AQUAfast Manganese HR, Powder	0.2 - 20.0 mg/L	100	
	Tablet	AC2055	AQUAfast II Manganese	0.05 - 4 mg/L	50	
	Liquid <b>NEW</b>	AC4P54	AQUAfast Manganese LR, Powder and Liquid	0.01 - 0.7 mg/L	50	
Molybdate	Powder	AC4P42	AQUAfast Molybdenum/Molybdate, HR, Powder	0 - 40.0 mg/L	100	
	Tablet <b>NEW</b>	AC3042	AQUAfast Molybdate Tablet	1.0 - 50.0 mg/L	100	
Monochloramine	Liquid <b>NEW</b>	AC4P26	AQUAfast Monochloramine, Powder and Liquid	0.04 - 4.50 mg/L	50	
Nitrate	Tablet	AC2007	AQUAfast II Nitrate	1 - 40 mg/L	50	
	Liquid <b>NEW</b>	ACR007	AQUAfast Nitrate Powder and Reaction Tube	1.0 - 30.0 mg/L	50	
Nitrite	Tablet	AC2046	AQUAfast II Nitrite, EPA-approved Method	0.05 - 0.50 mg/L	100	DW & WW
	Powder <b>NEW</b>	AC4P46	AQUAfast Nitrite LR, Powder	0 - 0.350 mg/L	100	
	Ampoule <b>NEW</b>	AC4046NL	AQUAfast IV Nitrite	0.080 - 0.80 mg/L	30	DW & WW Equivalent
Nitrogen	Liquid <b>NEW</b>	ACD004	AQUAfast Total Nitrogen LR Thermal Digestion Test	0.5 - 25 mg/L	25	
	Liquid <b>NEW</b>	ACD007	AQUAfast Total Nitrogen HR Thermal Digestion Test	5 - 150 mg/L	25	
Oxygen	Ampoule <b>NEW</b>	AC4008LR	AQUAfast Oxygen, Low Range	0.01 - 0.8 mg/L	30	
Ozone	Tablet	AC2048	AQUAfast II Ozone	0.05 - 0.5 mg/L	100	
Peroxide	Tablet <b>NEW</b>	AC3069	AQUAfast Hydrogen Peroxide Tablet	0.03 - 3 mg/L	100	
pH	Liquid	AC3001	AQUAfast pH, Phenol Red, Dropper Bottle	5.9 - 8.2	30	
	Tablet	AC2001	AQUAfast II pH Tablet Phenol Red	6.5 - 8.4	100	
	Tablet <b>NEW</b>	AC3001BP	AQUAfast pH Tablet Bromocresol Purple	5.2 - 6.8	100	
	Tablet <b>NEW</b>	AC3001TB	AQUAfast pH Tablet Thymol Blue	8.0 - 9.6	100	
PHMB (Guanidine)	Tablet <b>NEW</b>	AC3093	AQUAfast PHMB (Biguanide) Tablet	2.0 - 60.0 mg/L	100	
Phosphate	Powder	AC4P95	AQUAfast Phosphorus 3, Powder	0.07 - 2.5 mg/L	100	DW & WW Equivalent
	Tablet	AC2096	AQUAfast II Phosphorus HR	10 - 100 mg/L	50	
	Tablet	AC2095	AQUAfast II Phosphorus LR	0.05 - 4.0 mg/L	50	DW & WW
	Liquid <b>NEW</b>	ACR095	AQUAfast Ortho Phosphate Powder and Reaction Tube	0.06 - 5 mg/L	50	DW & WW Equivalent
	Liquid <b>NEW</b>	ACD095AH	AQUAfast Acid Hydrolyzable Phosphate Powder/Thermal Digestion Test	0.02 - 1.6 mg/L	50	DW & WW Equivalent
	Liquid <b>NEW</b>	ACD095	AQUAfast Total Phosphate Powder/Thermal Digestion Test	0.02 - 1.1 mg/L	50	WW Equivalent
Potassium	Tablet <b>NEW</b>	AC3019	AQUAfast Potassium Tablet	0 - 12 mg/L	100	
Silica	Powder	AC4P60	AQUAfast Silica HR, Powder Packets	1.0 - 75.0 mg/L	100	DW & WW
	Tablet	AC2061	AQUAfast II Silica Phosphate Removal	NA	100	
	Tablet	AC2060	AQUAfast II Silica	0.05 - 4.0 mg/L	50	DW & WW
	Liquid <b>NEW</b>	AC4P60LR	AQUAfast Silica LR Powder and Liquid	0.1 - 1.6 mg/L	50	
Sodium Hypochlorite	Tablet <b>NEW</b>	AC3073	AQUAfast Sodium Hypochlorite Tablet	0.2 - 16 mg/L	100	
Sulfate	Powder	AC4P82	AQUAfast Sulfate 4, Powder Packets	2 - 100 mg/L	100	DW & WW Equivalent
	Tablet	AC2082	AQUAfast II Sulfate	5 - 200 mg/L	100	DW & WW Equivalent
Sulfide	Tablet	AC2016	AQUAfast II Sulfide	0.05 - 0.50 mg/L	50	
Zinc	Tablet	AC2065	AQUAfast II Zinc/Copper	0.02 - 1.0 mg/L	50	WW Equivalent

The Orion AQ3700 AQUAfast meter offers many tests critical for the water and wastewater industries. New nutrient testing capabilities will protect our ecosystems.

<b>AQ3700 Meter Specifications</b>	<b>Incident Light Source:</b> 6 Light Emitting Diodes (LEDs)
	<b>LED Wavelengths:</b> 430, 530, 560, 580, 610, 660 nm
	<b>Photometric Accuracy:</b> 2% full scale as measured with standard solutions
	<b>Photometric Resolution:</b> +/- 0.005 Abs
	<b>New Method Upload Capability:</b> Yes, via internal RJ45 port
	<b>Output:</b> IRDA (order IRIM adapter AQ37IRIM separately)
	<b>User Interface</b>
	<b>Display:</b> Graphic display
	<b>Backlit:</b> Yes
	<b>Inputs:</b> 15 button keypad
<b>Key Functions:</b> Numeric keys, On/Off, Up, Down, Enter, Timer, Zero, Test, Cal, Mode, Store, Shift, plus 3 Function keys	
<b>Test methods:</b> Preprogrammed with user prompts and feedback, user's favorite's list, 10 user defined method locations	
<b>Automatic Range Selection:</b> Yes	
<b>Blank Capacity:</b> Per method	
<b>Datalog Points:</b> Up to 1000, time and date stamp	
<b>Test Reagent Formats:</b> Powder, tablet, liquid, reagent tubes, digestion tubes. Color, Turbidity and Suspended Solids tests do not require reagents.	
<b>Sample Required:</b> 10mL	
<b>Sample Cells:</b> 24mm and 13mm diameter vials and 16mm tubes	
<b>Software Languages:</b> English, French, German, Spanish, Italian	
<b>Auto shut down:</b> 20 min after last key-press, wakes to last location	
<b>Field Case:</b> 17 in W x 13 in L x 6 in H black case, molded and foam to secure meter, sample cells, adapters, stir rod, brush and enclosed upper section for user guide & reagent packs	
<b>Power:</b> 4 AA batteries (>3000 tests)	
<b>Regulatory and Safety (CE)</b>	
<b>Environmental Operating Conditions:</b> ± 1999.9 mV	
<b>Ambient Operating Temperature:</b> 5 to 40 °C	
<b>Relative Humidity:</b> 30 to 90%, Non-Condensing at 30 °C	
<b>Certifications:</b> CE	
<b>Waterproof Rating:</b> IP67	
<b>Warranty:</b> 2 year	

### Accessories for AQ3700 Meter

Cat. No.	Description
<b>AQ3700</b>	AQ3700 meter with samples cells, adapters, stir rod, brush in 17 in W x 13 in L x 6 in H (inches) field case with enclosed upper section for user guide with test methods and powder and tablet reagent storage. Order reagents separately
<b>AC2V16</b>	Replacement 16mm vials, pkg of 10
<b>AC2V24</b>	Replacement 24mm vials, pkg of 12
<b>AC3SR24</b>	Sealing ring for 24mm vial pkg of 12
<b>AC37A16</b>	Replacement 16mm adapter for AQ3700
<b>AC37A13</b>	Replacement 13mm adapter for AQ3700
<b>AC3ROD</b>	Tamping Stir rod, pkg of 10
<b>AC3CBR</b>	Cleaning Brush, pkg of 10
<b>AC3VSK</b>	Meter Verification Check Standards Kit
<b>AQ37IRIM</b>	IR Data Transfer Interface Module, with USB cable, user guide, software and batteries

For more information, contact your local Thermo Scientific products dealer or call our customer and technical service experts at 1-800-225-1480 (for the US and Canada) or visit [www.thermo.com/water](http://www.thermo.com/water).

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S-AQ3700-E-0110 RevA

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