

Thermo Scientific Orion AQUAfast® AQ3700 Colorimeter NEW

Featuring digestion tests for nitrogen, phosphate and COD

Reagents for AQ3700

Cat. No.	New Test	Range, mg/L	Reagent Type
AC3002AD	Acid demand pH 4.3	0.1 to 4	Tablet
AC3002M	Alkalinity-m	5 to 200	Tablet
AC3002P	Alkalinity-p	5 to 500	Tablet
AC4P27	Aluminum	0.01 to 0.25	Tablet & liquid
ACD012	Ammonia, LR	0.02 to 2.5	Thermal digestion tube
ACD011	Ammonia, HR	1 to 50	Thermal digestion tube
AC3089	Boron	0.1 to 2	Tablet
AC2070LQ	Chlorine	0.02 to 4	Liquid
AC3072	Chlorine total HR	5 to 200	Tablet
AC4P06	Cyanide	0.01 to 0.5	Liquid & powder
AC2098	Cyanuric acid	2 to 160	Tablet
AC3002AD	DEHA	0.02 to 0.5	Liquid & powder
AC4P88	DEHA	20 to 500	Liquid & powder
AC3032C	Hardness, calcium	50 to 900	Tablet
AC3032T	Hardness, total	2 to 50	Tablet
AC3032HR	Hardness, total HR	20 to 500	Tablet
AC4P30	Hydrazine	0.05 to 0.5	Powder & spoon
AC3030LQ	Hydrazine	0.01 to 0.6	Liquid
AC3069	Hydrogen peroxide	0.03 to 3	Tablet
AC3053	Iodine	0.05 to 3.6	Tablet
AC3078	Iron (II, III) soluble	0.02 to 1	Tablet
AC4P54	Manganese, LR	0.01 to 0.7	Powder & liquid
AC3042	Molybdate	1.0 to 50.0	Tablet
ACR007	Nitrate	1.0 to 30.0	Powder pack & reaction tube
AC4P46	Nitrite	0.01 to 0.3	Powder pack
ACD004	Nitrogen, total, LR	0.5 to 25	Powder pack & digestion tube
ACD007	Nitrogen, total, HR	5 to 150	Powder pack & digestion tube
AC4008LR	Oxygen, dissolved	0.01 to 0.8	Ampoule
AC3093	PHMB (biguanide)	2.0 to 60.0	Tablet
ACR095	Phosphate, ortho	0.06 to 5	Powder pack & reaction tube
ACD095AH	Phosphate, acid hydrolyzable	0.02 to 1.6	Powder pack & digestion tube
ACD095	Phosphate, total	0.02 to 1.1	Powder pack & digestion tube
AC3001BP	pH	5.2 to 6.8	Tablet
AC3001	pH	6.5 to 8.4	Liquid
AC3001TB	pH	8.0 to 9.6	Tablet
AC3019	Potassium	0 to 12	Tablet
AC4P60LR	Silica LR	0.1 to 1.6	Powder & liquid
AC3073	Sodium hypochlorite	0.2 to 16	Tablet
AC4P82	Sulfate	5 to 100	Powder pack
AC3013	Urea	0.1 to 3	Tablet & liquid

The AQUAfast 3700 is the newest addition to the colorimetry line. With over 70 pre-programmed method options, this IP67 waterproof portable meter offers liquid, powder and tablet tests for expanded ranges and test options. There are six wavelengths generated by the long life LEDs in the meter. This instrument has a graphical display that is easy to understand and can be used in English, Spanish, German, French, or Italian.

See pages 80-81 and 83-85 for additional AQ3700 reagents.



Specifications	Description
Incident Light Source	6 Light Emitting Diodes (LED)
Wavelengths	430, 530, 560, 580, 610, 660 nm
Photometric Precision	2 % full scale as measured with standard solutions
Photometric Resolution	+/- 0.005 Abs
Software	
Test Methods	Preprogrammed with user prompts and feedback, user's favorite list
Autoranging	Yes
Blank Capability	Per method
Test Reagent Formats	Powder, tablet, liquid, reagent tubes, acid digestion tubes
Datalog Points	Up to 1000, time and date stamp
New Method Upload Capability	Yes, via internal RJ45 port
Meter Hardware	
Display	Backlit, graphic display
Inputs	12 button numeric keypad, plus 3 function keys
Sample Required	10 mL
Sample Cells Accepted	24 mm sample vials and 13 mm ampoules and 16 mm tubes with adapters
Outputs	IRDA (adapter required)
Auto Shut Down	20 min after last key-press, wakes to last location
Power	4 AA batteries (>3000 tests)
Regulatory and Safety	CE
Environmental Conditions	5 to 40 °C (30 to 90% non-condensing at 30 °C)
Meter Waterproof Rating	IP67
Warranty	2 years

Ordering Information

Cat. No.	Description
AQ3700	Meter kit includes AQ3700 meter, 4 batteries, 4 vials (24 mm), 3 vials (16 mm), 1 adapter each for 16 mm and 13 mm vials, carrying case, user guide with test methods, tablet tampering stir rod and brush. Order Starter Kits and/or Reagents and IR Adapter Separately.

See page 80 for AQ3700 accessories.

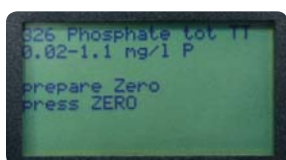
Thermo Scientific Orion Digestion Test Reagents NEW



AQUAfast AQ3700 Meter



Total nitrogen LR test



Total phosphate test

Tube digestions for nitrogen and phosphate nutrient removal process monitoring

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. Undertreatment can cause problems if the discharge does not meet the permit levels. Typically total nitrogen and total phosphate and other digestions were 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 or give you timely information to correct the process.

With the AQ3700 meter, total nitrogen and total phosphate tube digestion tests are now available. The kit includes the reagents and accessories for the test.

If you are already testing COD levels, you can quickly add these important tests and start reaping the benefits!

Overview of nitrogen and phosphorus methods

- Persulfate digestion for nitrogen; persulfate/ascorbic acid digestion for phosphorus
- Nitrogen tests require two tubes – one for a blank and one for the test; phosphate test needs just one tube for the blank and test
- 100 °C digestion temperature for 30 minutes and let cool about 10 more minutes for additional reagent reaction times
- AQUAfast COD digestors have the temperatures needed for nitrogen and phosphate tests

Nitrogen

Cat. No.	Description	Quantity
ACD004	Total nitrogen LR reagents (0.5 to 25 mg/L)	50 tests
ACD007	Total nitrogen HR reagents (5 to 150 mg/L)	50 tests
AC2V16	16 mm vials	

Phosphate

Cat. No.	Description	Quantity
ACD095	Total phosphorous reagents (0.02 to 1.1 mg/L)	50 tests
AC2V16	16 mm vials	

Accessories for AQ3700 Meter

Cat. No.	Description
AC2V16	Replacement 16 mm vials, package of 10
AC2V24	Replacement 24 mm vials, package of 12
AC37SR24	Sealing ring for 24 mm vial, package of 12
AC37A16	Replacement 16 mm adapter for AQ3700
AC37A13	Replacement 13 mm adapter for AQ3700
AC3ROD	Stir rod, package of 10
AC3CBR	Cleaning brush, package of 10
AC3VSK	Meter verification check standards kit
AQ37IRIM	IR data transfer interface module