



Colorimeters and Chlorine Testing

In many industries, including the beverage can industry, the accurate monitoring of chlorine levels, both free and total, plays a crucial role in disinfection and sanitation. However, excessive levels can lead to undesirable staining and defects.

To ensure your final product meets stringent quality standards and regulatory compliance, Astles offers both free and total chlorine testing equipment as well as sulphate testing.

AQ3170 Field Colorimeter

Obtain precise free and total chlorine measurements using a versatile colorimeter. Suitable for both laboratory and field settings across various sectors including drinking water, wastewater, food & beverage, and agriculture.

The AQ3170 colorimeter boasts a durable, waterproof construction. Designed for enhanced user experience, it features a large, backlit display, real-time clock, and automatic data logging.

Specifically engineered for dedicated free and total chlorine testing in water and wastewater, the Orion AQUAfast AQ3170 chlorine colorimeter aids in US EPA testing compliance. Utilizing an LED light source at 530 nm, it offers two testing ranges: 0.02 to 2.00 mg/L chlorine using powder DPD reagents and standard 24mm vials, and 0.1 to 8.0 mg/L chlorine using powder DPD reagents and new 10mm plastic vials.

Certified with CE, IP-67 waterproof rating, the AQUAfast AQ3170 chlorine colorimeter is compatible with Orion AQUAfast free and total chlorine powder DPD reagents, available in standard 100 individual powder packs and new bulk powder dispensers with refillable vials for 250 dispense counts each see page 3.



Features

- Dedicated to free and total chlorine testing
- Convenient scroll-driven menu system
- Automatic switch-off
- 16-point internal automatic data storage with date/time stamp
- Easy-to-read, backlit display
- One time zero function
- Waterproof design IP-67
- Angled, ergonomic design for easy bench top or hand-held use
- Calibration to government or organizational standards (ex. NIST or ISO)
- 1 year warranty



AQ4000 Advanced Field Colorimeter

The Thermo Scientific™ AQUAfast AQ4000 measures colorimetric parameters of samples. With 65 pre-programmed methods and automatic selection of four wavelengths, it offers convenience and accuracy. The inclusion of auto-test ampoules featuring Auto-ID barcodes streamlines preparation and testing. These ampoules come prefilled to precisely measure the sample and eliminate manual adjustments. The colorimeter reads the barcode, identifies the parameter, and initiates the test, ensuring efficient and error-free use.

The AQ4000 features include its ability to identify the species to be measured, ensuring error-free readings, as it automatically selects the program and initiates measurements. The colorimeter guides users through setup and measurement processes, making it accessible even to users with minimal technical expertise.

Its IP67 waterproof rating ensures durability in various conditions. Moreover, the AQ4000 allows users to customize calibration, create custom methods and can store up to 10 methods. With the ability to datalog 100 points in the field, complete with time and date tags, the AQ4000 is unmatched in water and wastewater analysis.

Features

- Identifies the fluid to be measured.
- Auto Selects the program and initiates the measurement.
- Guides user step by step.
- Waterproof to IP67 standards.
- Custom calibrations and test methods
- Up to 12 data points can be used to define custom method.
- User can datalog 100 points in the field with a time and date tag
- 1 year warranty



Test Kit	Range	Test Kit	Range
Aluminium	0 to 3 mg/L	Ammonia - LR	0 to 7 mg/L
Ammonia - HR	0 to 16 mg/L	Bromine	0 to 9 mg/L
Chlorine (free)	0 to 6 mg/L	Chlorine (total)	0 to 6 mg/L
Chlorine Dioxide	0 to 11 mg/L	Copper (soluble)	0 to 14 mg/L
Cyanide (free)	0 to 0.5 mg/L	Fluoride	0 to 2 mg/L
Hydrazine	0 to 1.2 mg/L	Iron	0 to 7 mg/L
Manganese	0 to 20 mg/L	Molybdate	0 to 30 mg/L
Nitrate 1 - LR	0 to 1.5 mg/L	Nitrate 2 - MR	0 to 3 mg/L
Nitrate 3 - HR	0 to 50 mg/L	Nitrite	0 to 0.8 mg/L
Oxygen	0 to 15 mg/L	Ozone	0 to 2 mg/L
pH	6.5 to 8.5 pH	Phosphate 1 - HR	0 to 80 mg/L
Phosphate 2 - LR	0 to 8 mg/L	Silica	0 to 14 mg/L
Sulphate	0 to 70, 5 to 200 mg/L	Sulphide (soluble)	0 to 3 mg/L
Zinc	0 to 3 mg/L	Ammonia - LR	0 to 7 mg/L



Chlorine/ Sulphate Test Consumables

Free and Total Chlorine Test Sachets

Our Free and Total Chlorine Tests powder sachets come pre-measured for your convenience, ensuring precision every time. Simply add the sachet to your sample stir gently. Let the solution stand for a few minutes, then observe any colour changes against the provided charts or using our Colourimeter AQ4000 or AQ3170.

Free / Total Chlorine Dispenser & Test Vials

Thermo Scientific™ AQUAfast Free and Total Chlorine Bulk DPD Powder Dispensers and Vials are designed for high volume testing of residual chlorine in water samples. The powders dissolve quickly in the solution and are easy to mix. Each vial contains 250 counts of DPD reagent and is available for free chlorine or total chlorine analysis in the lab or field.

- Measure 0.02 to 2.00 mg/L (ppm) free chlorine or total chlorine
- Bulk powder dispensers are designed for high sample throughput – reduces the cost per test and minimizes waste compared with individually packaged reagents
- Equivalent to other widely used and recognized chemistries including AQUAfast AC4P71 free chlorine and AQUAfast AC4P72 total chlorine powder packs.
- Compatible with AQ4000 and AQ3170 colorimeters.



Sulphate Test Tablets

In addition to free and total chlorine testing ACS also supplies packs Sulphate test tablets that can be used with our AQ4000 colorimeters. Each pack contains 100 tablets to ensure easy and consistent ratios for testing.

Ordering Information

Product Code	Name	Tests Supplied
AQ4000	ACS Aquafast IV Colorimeter	Not Included
AQ3170	ACS Field Colorimeter	x100Total x100Free
AC4P71	Aquafast Free Chlorine Tests. Pack of 100.	x100
AC4P72	Aquafast Total Chlorine Tests. Pack of 100.	x100
AC2082	Aquafast II Sulphate Tests. Pack of 100.	x100
AQ250F	Free/Total Chlorine Dispenser & test vials x1	x250
AQ250F-5	Free/Total Chlorine Dispenser & test vials x5	x1250
AC71P2	Test Vials for Dispenser x1	x250
ECCUVKIT	4 pack of Colorimeter test vials (Empty)	NA