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Robust design for accurate chlorine measurements

The rugged, waterproof design of the Thermo Scientific™ Orion™ AQUAfast™ AQ3170 colorimeter makes it ideal for laboratory and field testing of chlorine in water.

Applications:
• Drinking Water

• Wastewater

• Food and Beverage

• Aquaculture

• Agriculture

The Thermo Scientific Orion AQUAfast AQ3170 colorimeter kit measures free and total chlorine in the range of 0.02 to 2.00 mg/L, or 0.1 to 8.00 mg/L with short pathlength vial (included). Measuring free and total chlorine using the DPD method, the AQ3170 colorimeter and included reagents assist with EPA drinking water measurement requirements. The colorimeter's Interference Filter uniquely narrows (targets) the bandwidth, creating accurate and reproducible readings. The included sample vials also help reduce preparation time by utilizing lid-attached light shields instead of a cumbersome sample chamber cover.

The AQUAfast AQ3170 colorimeter offers a number of features designed to improve user experience, including a large, backlit display, a real time clock and automatic data logging.

Colorimetry Features
• Convenient scroll-driven menu system

• Automatic switch-off

• 16 point internal data storage with date/time stamp

• Easy-to-read, backlit display

• One-time zero function

• Waterproof design (IP67)

• Angled, ergonomic design for easy bench top or hand-held use

• Calibration to government or organizational standards (ex. NIST or ISO)

• Calibration can be refined for very specific measurement ranges

• Account for any interferences that are known to be present in the sample

• 2 year warranty*

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AQUAfast AQ3170 colorimeter kit

The meter kit includes a field carrying case, sample vials with light-shielding caps, a vial cleaning brush, 100 each of AQUAfast AC4P71 Free Chlorine and AC4P72 Total Chlorine powder reagent packets and batteries. The meter carries a CE certification and a two year warranty.*

Instrument Settings

Scroll Memory (SM)
Instrument memorizes the last method used before switching off the instrument. When the instrument is switched on again, the scroll list comes up with the last used test method first.

Zero Setting (OTZ)
The zero setting is held in memory until the device is turned off. (One Time Zero - OTZ). The zero setting can be confirmed whenever it is required.

Ordering Information

Cat. No.	Description
AQ3170	AQUAfast AQ3170 chlorine colorimeter with free and total chlorine powder packs (100 each), sample vials with lids, field case, batteries and literature
AC4P71	Free chlorine reagent powder packs (100 tests)
AC4P72	Total chlorine reagent powder packs (100 tests)
AQ250F	AQUAfast free chlorine DPD bulk powder dispenser with one vial
AC71P1	AQUAfast free chlorine DPD powder refill vial for AQ250F dispenser, 250 count
AC71P2	AQUAfast free chlorine DPD powder refill vials for AQ250F dispenser, 500 count
AQ250T	AQUAfast total chlorine DPD powder dispenser with one vial
AC72P1	AQUAfast total chlorine DPD powder refill vial for AQ250T dispenser, 250 count
AC72P2	AQUAfast total chlorine DPD powder refill vials for AQ250T dispenser, 500 count
AC2V24	Replacement 24 mm glass sample vials, 12 pack
AC2V10	Replacement 10 mm plastic sample vials, 12 pack
AC3CBR	Replacement sample vial cleaning brush, 10 pack
CLSK100	AQUAfast chlorine primary standard kit to prepare 1.5 mg/L NIST-traceable chlorine standard
CLSK200	AQUAfast chlorine secondary standards (0.0, 0.20 and 1.0 mg/L) for AQ3170 chlorine colorimeter

Product Specifications

Description	Single wavelength, direct reading colorimeter
Light Source	LED, interference filter (IF) and photosensor in transparent cell chamber. Wavelength specifications of the IF: 530 nm Δλ = 5 nm
Wavelength	530 nm
Wavelength Accuracy	± 1 nm
Photometric Accuracy	3% FS (T = 20 °C - 25 °C, tested with standard solutions)
Photometric Resolution	0.01 A
Power Supply	4 batteries (AAA)
Operating Time	17 hours operating time or 5,000 test measurements in continuous mode when display backlight is off
Auto – OFF	Automatic switch-off, 10 minutes after last keypress
Display	Backlit LCD (on keypress)
Storage	Internal ring memory for 16 data sets
Time	Real-time clock and date
Calibration	User and factory calibration. Reset to factory calibration possible.
Dimensions	155 x 75 x 35 mm (L x W x H)
Weight	Basic unit approx. 260 g (incl. batteries)
Environmental Conditions	Temperature: 5 - 40 °C Relative humidity: 30 - 90% (non-condensing)
Certification	CE
Testing Reagents	Powder packs
Waterproof	IP67

Measurement Parameter Specifications

Chlorine Free and Total	
Range	0.02 to 2.00 mg/L 0.1 to 8.0 mg/L
Resolution	0.01 mg/L
Accuracy	±0.05 mg/L (0.02 to 1.00 mg/L) ±0.10 mg/L (1.01 to 2.00 mg/L) ±0.20 mg/L (2.01 to 3.00 mg/L) ±0.30 mg/L (3.01 to 4.00 mg/L) ±0.40 mg/L (4.01 to 8.00 mg/L)

*Subject to terms of Thermo Fisher Scientific's limited warranty. Please contact your sales representative for more details.

Find out more at **thermofisher.com/water**

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