

## Durable construction, designed for accuracy



Designed to provide accurate measurements, the Thermo Scientific Orion AQUAfast AQ3140 COD colorimeter makes it ideal for laboratory testing of chemical oxygen demand (COD).

### Applications

- Wastewater
- Food and Beverage
- Aquaculture
- Agriculture



The Thermo Scientific™ Orion™ AQUAfast™ AQ3140 COD colorimeter is a single parameter instrument for determining chemical oxygen demand in water.

The AQUAfast AQ3140 COD colorimeter and COD reagents measures COD in the range of 0 - 15000 mg/L through dichromate method that estimates the theoretical oxygen demand, i.e. the amount of oxygen consumed in total chemical oxidation of the organic constituents present in the water. The colorimeter is designed to give accurate results that are highly reproducible. AQ3140 measures the COD concentration by photometric detection employing a linear relationship between absorbance and concentration.

The AQUAfast AQ3140 colorimeter offers a number of features designed to improve user experience, including two LED light sources for long-term stability.

### Colorimetry Features

- Large digital backlit display
- Automatic switch-off
- User-friendly keypad
- Real-time clock and date
- Calibration mode
- Storage function
- Waterproof design (IP67)
- Angled, ergonomic design for easy bench top or hand-held use
- 2 year warranty\*

## Ranges

**Low Range:** 0 - 150 mg/L O<sub>2</sub>

**Mid Range:** 0 - 1500 mg/L O<sub>2</sub>

**High Range:** 0 - 15000 mg/L O<sub>2</sub>

## Scroll Memory (SM)

To avoid unnecessary scrolling for the required test method, the instrument memorizes the last method used before switching off. When the instrument is switched on again, the scroll list comes up with the last used test method first.

## Ordering Information

Cat. No.	Description
AQ3140	AQUAfast AQ3140 COD colorimeter with field case, batteries and literature
CODL00	COD, low range 0 - 150 mg/L, dichromate digestion method, 25 tests
CODL150	COD, low range 0 - 150 mg/L, dichromate digestion method, 150 tests
CODH00	COD, mid range 0 - 1500 mg/L, dichromate digestion method, 25 tests
CODM150	COD, mid range 0 - 1500 mg/L, dichromate digestion method, 150 tests
CODHP0	COD, high range 0 - 15000 mg/L, dichromate digestion method, 25 tests
CODH150	COD, high range 0 - 15000 mg/L, dichromate digestion method, 150 tests
COD165	Thermoreactor for digestion methods, 100 to 165 °C selectable temperature controls
CODS01	1000 mg/L COD standard, 475 mL
CODS10	10000 mg/L COD standard, 475 mL



## Product Specifications

<b>Description</b>	Double wavelength, automatic wavelength selection, direct reading colorimeter
<b>Light Source</b>	LEDs, interference filters (IF) and photosensor in transparent cell chamber. Wavelength specifications of the IF: 430 nm $\Delta\lambda = 5$ nm, 610 nm $\Delta\lambda = 6$ nm
<b>Wavelength</b>	430 nm, 610 nm
<b>Wavelength Accuracy</b>	$\pm 1$ nm
<b>Photometric Accuracy</b>	3 % FS (T = 20 °C - 25 °C)
<b>Photometric Resolution</b>	0.01 A
<b>Power Supply</b>	4 batteries (AAA)
<b>Operating Time</b>	17 hours operating time or 5,000 test measurements in continuous mode when display backlight is off
<b>Auto-Off</b>	Automatic switch-off, 10 minutes after last key press
<b>Display</b>	Backlit LCD (on keypress)
<b>Storage</b>	Internal ring memory for 16 data sets
<b>Time</b>	Real-time clock and date
<b>Calibration</b>	User and factory calibration Reset to factory calibration possible
<b>Dimensions</b>	155 x 75 x 35 mm (L x W x H)
<b>Weight</b>	Basic unit approx. 260 g (incl. batteries)
<b>Environmental Conditions</b>	Temperature: 5 - 40 °C Relative humidity: 30 - 90 % (non-condensing)
<b>Certification</b>	CE
<b>Testing Reagents</b>	Digestion vial tubes
<b>Waterproof</b>	IP67

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

## Water and Lab Products

**Australia:** (613) 9757-4300 In Australia: (1300) 735-295 **China:** (86) 21-6865-4588

**Germany:** (49) 6184-90-6321 **India:** (91) 22-4157-8800 **Japan:** (81) 045-453-9175

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