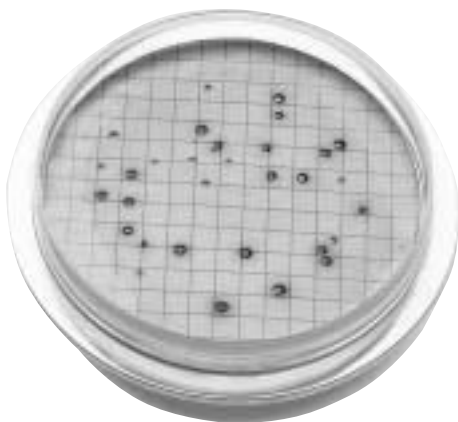


m-ColiBlue24[®] Broth



Hach's m-ColiBlue24 Broth is EPA-accepted. Use it for easy detection and identification of coliforms and Escherichia coli with quick 24-hour detection time. No fluorescent lamps or confirmation are required.



Microbiology

Features and Benefits

24-Hour Detection and Identification

Hach's m-ColiBlue24 Broth simultaneously detects and identifies both total coliforms and *Escherichia coli* (*E. coli*). Incubation time is 24 hours for complete enumeration. There is no confirmation step.

Easy to Read

m-ColiBlue24 makes it easy to differentiate between coliforms and *E. coli*—*E. coli* are blue; other coliforms are red; total coliforms are the sum of the two. It's that simple.

Easy to Interpret

m-ColiBlue24 requires no fluorescent lamps or color comparators—interpretation of the results is through easy, visual identification.

More Accurate

Enumerate test results directly with m-ColiBlue24 Broth. m-ColiBlue24 is much more accurate and precise than statistical-based tests such as Most Probable Number (MPN) and Multiple Tube Fermentation (MTF).^{1,2,3}

Less Expensive

m-ColiBlue24 is the best value for an EPA-approved, 24-hour media for enumeration of total coliforms and *E. coli*. In addition, Hach Company not only offers the total solution, but also special discount packages on media, Petri dishes, membranes, and filtration equipment.

Applications

Hach's m-ColiBlue24 Broth has been approved by the EPA for monitoring drinking water and wastewater using a 24-hour incubation period. It can also be used to detect coliforms in other types of water—bottled, surface, ground, well, recreational (fresh or marine), as well as process water for ultrapure chemical processing.

Specifications*

Incubation

24 hours at 35 ± 0.5 °C

Sensitivity

1 CFU/100 mL

Selectivity

Contains inhibitors to minimize the growth of non-coliform organisms

Storage and Shelf Life

Refrigerate at 2 to 8°C for up to one year from date of manufacture

QC Panel

Enterobacter cloacae (ATCC# 23355)

Escherichia coli (ATCC# 25922)

Klebsiella pneumoniae (ATCC# 13883)

Pseudomonas aeruginosa (ATCC# 27853)

**Specifications subject to change without notice*

DW

WW

IW

E

FB

¹Federal Register, Vol. 66, No. 169, Thursday, August 30, 2001

²Grant, M.A. 1997. "A New membrane Filtration Medium for Simultaneous Detection and Enumeration of *Escherichia coli* and Total Coliforms," *Applied and Environmental Microbiology*, 63:3526-3530

³"Study Report for the Proposed US EPA Approval of IDEXX's Colilert[®]-18 and Colilert[®] for the Detection and Enumeration of *Escherichia coli* in Wastewater Samples," EPA Docket ID OW-2004-0014-0011

DW = drinking water WW = wastewater municipal PW = pure water / power
IW = industrial water E = environmental C = collections FB = food and beverage



Be Right[™]

Using Hach m-ColiBlue24 Broth

A standard volume of 100 mL is tested for drinking water or wastewater with the expectation of finding zero coliform or *E. coli* colonies. When analyzing samples from other sources, it may be necessary to test larger or smaller volumes. The goal is to obtain samples that produce approximately 20 and not more than 100 colonies of all types per membrane.

Procedure

1. Mix the broth by inverting the ampoules two or three times. Pour the contents evenly over the absorbent pad and place the lid on the Petri dish.
2. Filter the sample or diluted sample using a 47 mm white gridded 0.45 µm membrane filter, grid side up. Transfer the filter to the previously prepared Petri dish using sterile forceps.
3. Place the filter, grid side up, onto the absorbent pad with a slight rolling motion. Check for trapped air under the filter and make sure the filter touches the entire pad. Replace the Petri dish lid.
4. Invert the Petri dish and incubate at 35 ± 0.5 °C for 24 hours.
5. Count the colonies. Use a 10 to 15X stereoscopic microscope, if necessary. If no red or blue colonies appear, the sample can be considered negative. If red or blue colonies appear at 24 hours incubation, the result is positive for total coliforms or *E. coli*, respectively. No confirmation step is required.

Calculating Coliform Density

Use the following equation to calculate coliform density on a single membrane filter:

$$\text{Coliforms per 100 mL} = (\text{Coliform colonies counted} / \text{mL sample filtered}) \times 100$$

Note: "mL sample" refers to actual sample volume, and not volume of the dilution.

Evaluating and Reporting Results

- If growth covers the entire filtration area of the membrane or a portion of it, and colonies are not discrete, report results as "Confluent Growth With or Without Coliforms."
- If the total number of colonies (coliforms plus non-coliforms) exceeds 200 per membrane or the colonies are too indistinct for accurate counting, report the results as "Too Numerous To Count (TNTC)."

In either case, a new sample must be run using a dilution that provides about 20 and not more than 100 colonies of all types.

Ordering Information

- 2805215** m-ColiBlue24 Prepared Agar Plates; 15/pk
2608420 m-ColiBlue24 Broth; glass ampoules, 2 mL, 20/pk
2608450 m-ColiBlue24 Broth; plastic ampoules, 2 mL, 50/pk
2608442 m-ColiBlue24 Broth; 100 mL bottle

Lit. No. 2628

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In the interest of improving and updating its equipment, Hach Company reserves the right to alter specifications to equipment at any time.

At Hach, it's about learning from our customers and providing the right answers. It's more than ensuring the quality of water—it's about ensuring the quality of life. When it comes to the things that touch our lives...

Keep it pure.

Make it simple.

Be right.

For current price information, technical support, and ordering assistance, contact the Hach office or distributor serving your area.

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Be Right™