Enterococcus Confirmatory Agar

Intended Use
Enterococcus Confirmatory Agar is recommended for confirming the presence of Enterococci in water supplies and other sources.

Summary
Enterococcus Confirmatory Agar, formulated by Sandholzer and Winter, is used for the detection of Enterococci in water supplies, swimming pools, sewage etc. Enterococci are found as normal flora in the gastrointestinal tracts of humans and animals. They are becoming increasingly important agents of human diseases largely because of their resistance to antimicrobial agents to which other Streptococci are generally susceptible. The *Enterococcus* is a subgroup of the fecal Streptococci group that includes *Enterococcus faecalis, Enterococcus faecium, Enterococcus gallinarum,* and *Enterococcus avium*. Enterococci are differentiated from other Streptococci by their ability to grow in 6.5% sodium chloride, at pH 9.6 and at 10°C and 45°C. The ability of organisms to grow in the presence of variable amounts of sodium chloride is a test that has been used to characterize several bacteria, including the viridans Streptococci. It is useful for presumptive identification of the Entercoccal group D organisms which have the specific ability to grow in the presence of 6.5% NaCl incorporated into the medium. A positive test is the presence of bacterial growth in the medium. If the organism is bile esculin positive and grows in 6.5% NaCl broth, the organism is an Enterococcus species and if the organism is bile esculin positive and fails to grow in the 6.5% NaCl broth, the organism belongs to a group D Streptococci. The Enterococcal portion of the faecal Streptococcus group is a valuable bacterial indicator for determining the extent of faecal contamination of recreational surface waters.

Principle
Casein enzymic hydrolysate, yeast extract and dextrose provide essential growth nutrients for Enterococci. Sodium azide inhibits contaminating flora.

Formula*
Ingredients	**g/L**
Casein Enzymic Hydrolysate	5.0
Yeast Extract	5.0
Dextrose	5.0
Sodium Azide	0.4
Methylene Blue	0.01
Agar	15.0
Final pH (at 25°C)	8.0 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Water samples.

Specimen Collection and Handling
Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 30.41 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Dispense in 100 mL quantities in tubes and sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Allow the agar tubes to cool in a slanted position.

Warning: Sodium azide tends to form explosive metal azides with plumbing materials. It is advisable to use enough water to flush off the disposables.

Quality Control

Dehydrated Appearance: Light yellow to yellow homogeneous free flowing powder.
Prepared Appearance: Light blue coloured clear to slightly opalescent gel forms in tubes as slants.
Cultural Response: Cultural characteristics observed after an incubation at 45°C for 18-24 hours.

Organism (ATCC)	Growth
Escherichia coli (25922)	Inhibited
Enterococcus faecalis (29212)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Eaton A. D., Clesceri L. S. and Greenberg A. E., (Ed.), 1998, Standard Methods for the Examination of Water and Wastewater, 20th Ed., American Public Health Association, Washington, D.C.
2. Sandholzer and Winter, 1946, Commercial Fisheries Leaflet T1a
3. Edwards M. S., Baker C. J., 1990, Principles & Practice of Infectious Diseases, 3rd Ed., pp 1554-1563, NY.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201050120500	Dehydrated Culture Media	500 g