Pfizer Selective Enterococcus Agar

Intended Use
Pfizer Selective Enterococcus Agar is a general-purpose medium used for selective isolation and cultivation of Enterococci.

Summary
Enterococci may be considered an essential part of the autochthonous microflora of humans and animals. Because of its wide distribution, Enterococci can also occur in different food commodities, especially those of animal origin. A wide variety of selective media for *Enterococcus* has been recommended and used. Pfizer Selective Enterococcus Agar is used for the selective isolation and cultivation of Enterococci. This medium is formulated as per Isenberg, Goldberg and Sampson by reducing the concentration of bile salts and sodium azide from the original formulation. The importance of esculin hydrolysis in differentiating Enterococci and Streptococci was first reported by Rochaix as Streptococci do not exhibit esculin hydrolysis.

Principle
Casein enzymic hydrolysate, peptic digest of animal tissue and yeast extract provide nutrients like nitrogenous compounds, carbon, sulphur, vitamin B complex and trace ingredients for the growth of Enterococci. Esculin, a glycoside, is hydrolyzed by Enterococci to esculetin and dextrose. Esculetin reacts with ferric ammonium citrate to form a dark brown to black coloured complex. Bile salts and sodium azide inhibit Gram-positive (except Enterococci) and Gram-negative bacteria respectively. Pfizer Selective Enterococcus Agar is better used as selective primary medium.

Formula*

Ingredients	**g/L**
Casein Enzymic Hydrolysate	17.0
Peptic Digest of Animal Tissue	3.0
Yeast Extract	5.0
Bile Salts	10.0
Sodium Chloride	5.0
Sodium Citrate	1.0
Esculin	1.0
Ferric Ammonium Citrate	0.5
Sodium Azide	0.25
Agar	15.0
Final pH (at 25°C)	7.1 ± 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 2ºC-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
Food 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 the 57.75 g of the powder in 1000 mL purified / distilled water.
2. Mix thoroughly.
3. Boil with frequent agitation to dissolve the powder completely.
4. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Light yellow to pale green homogeneous free flowing powder.
Prepared Appearance: Light amber coloured clear to slightly opalescent gel with a bluish tinge forms in petridishes.
Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism (ATCC)	Growth	Esculin Hydrolysis
Klebsiella aerogenes (13048)	Inhibited	-
Escherichia coli (25922)	Inhibited	-
Staphylococcus aureus subsp. *aureus* (25923)	Good	-
Enterococcus faecalis (29212)	Good	+
Streptococcus pyogenes Strain Bruno (19615)	Good	-

Key: + = Blackening of the medium
- = No change

Performance and Evaluation

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

1. Directions
2. Storage
3. Expiry

Warranty

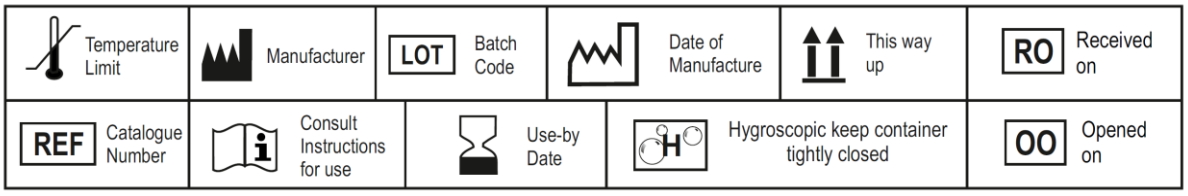
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Blzer R., Vergleichende Untersucgungen von Enterokokkenselektivnährböden. Inaug. Dissert., Univ. München, 1983.
2. Burkwall M. K., a. Hartman, P.A.: Appl. Microbiol., 12; 18-23 (1964).
3. Rochaix, 1924, C. R. Soc. Biol., 90: 771.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201160060500	Dehydrated Culture Media	500 g



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Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.