Starch Agar

Intended Use
Starch Agar is used for detection of starch hydrolysing microorganisms.

Summary
Starch Agar was formulated by Vedder for the cultivation of *Neisseria*. It is recommended for the detection of starch hydrolyzing microorganisms from foods and clinical samples. Present formulation is accepted by BIS for detection of starch hydrolysis by *Bacillus cereus.*

Principle
Peptic digest of animal tissue and meat extract provide nitrogenous compounds, carbon, sulphur, trace elements etc. to the microorganisms.

Formula*

Ingredients	g/L
Meat Extract	3.0
Peptic Digest of Animal Tissue	5.0
Starch, Soluble	2.0
Agar	15.0
Final pH (at 25°C)	7.2 ± 0.1

*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
Clinical samples; 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 25.00 g of the powder in 1000 mL purified / distilled water and mix thoroughly.
2. Boil with frequent agitation to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Mix well and pour in to sterile petridishes.

Quality Control
Dehydrated Appearance: Off white to yellow coloured, homogenous, free flowing powder.
Prepared Appearance: Off white to yellow coloured, clear to slightly opalescent gel forms in petridishes.
Cultural Response: Cultural characteristics observed after an incubation of 18-48 hours at 35°C-37°C.

Organism (ATCC)	Growth	Starch Hydrolysis*
Bacillus cereus (10876)	Good	Positive reaction, clearing around the colony
Bacillus spizizenii (6633)	Good	Positive reaction, clearing around the colony
Streptococcus pyogenes Strain Bruno (19615)	Good	Negative reaction, no clearing around the colony
Escherichia coli (25922)	Good	Negative reaction, no clearing around the colony
Staphylococcus aureus subsp. *aureus* (25923)	Good	Negative reaction, no clearing around the colony

Note:
Flood the surface of 24-48 hour old culture on Starch Agar with Gram's Iodine. Starch hydrolysis is seen as a colourless zone surrounding the colonies. A blue or purple indicates that starch is not hydrolysed.
Key- * On addition of Iodine solution.

Interpretation of Results

Starch hydrolysis is seen as a colourless zone surrounding the colonies. A blue or purple zone indicates that starch is not hydrolyzed.

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. Vedder, 1915, J. Infect. Dis., 16:385.
2. Harrigan W. and McCance M., 1976, Laboratory Methods in Food and Dairy Microbiology, Academic Press Inc. (London) Ltd.
3. Lennette and others (Eds.), 1985, Manual of Clinical Microbiology, 4th ed., ASM,Washington, D.C.
4. Bureau of Indian Standards, IS : 5887 (Part IV) 1976.
5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201190330500	Dehydrated Culture Media	500 g