

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 cara meat extract provide nitrogenous compounds, carbon, sulphur, trace elements etc. to the microorganisms.

Formula*

Ingredients	g/L
Cara 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.

[#] Equivalent to Meat Extract.

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*
<i>Bacillus cereus</i> (10876)	Good	Positive reaction, clearing around the colony
<i>Bacillus spizizenii</i> (6633)	Good	Positive reaction, clearing around the colony
<i>Streptococcus pyogenes</i> Strain Bruno (19615)	Good	Negative reaction, no clearing around the colony
<i>Escherichia coli</i> (25922)	Good	Negative reaction, no clearing around the colony
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (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

 Temperature Limit	 Manufacturer	 LOT	Batch Code	 Date of Manufacture	 This way up	 RO Received on
REF Catalogue Number	 Consult Instructions for use	 Use-by Date	 SH	Hygroscopic keep container tightly closed	OO	Opened on

Revision: 0825/VER-03

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.