# **PRODUCT DATA SHEET**



# TM 867 - STARCH AGAR

### **INTENDED USE**

Used as diluents for carrying out microbial limit test.

## **PRODUCT SUMMARY AND EXPLANATION**

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

Flood the surface of 24 - 48hour old culture on Starch Agar with Grams Iodine. Starch hydrolysis is seen as a colourless zone surrounding the colonies. A blue or purple zone indicates that starch is not hydrolyzed.

## COMPOSITION

Ingredients	Gms / Ltr
Meat Extract	3.000
Peptic digest of animal tissue	5.000
Starch, soluble	2.000
Agar	15.000

## PRINCIPLE

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

#### **INSTRUCTION FOR USE**

- Dissolve 25 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 10 minutes.
- Mix well and pour in sterile Petri plates.

#### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Yellow coloured homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.2±0.1

#### **INTERPRETATION**

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Starch Hydrolysis on addition of Iodine solution	Incubation Temperature	Incubation Period
Bacillus cereus	10876	50-100	Luxuriant	>=70%	Positive Reaction, clearing around the colony	35 - 37°C	18-48 Hours



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Bacillus subtilis	6633	50-100	Luxuriant	>=70%	Positive Reaction, clearing around the colony	35 - 37°C	18-48 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	Negative reaction , no clearing	35 - 37°C	18-48 Hours
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	Negative reaction , no clearing	35 - 37°C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70%	Negative reaction , no clearing	35 - 37°C	18-48 Hours

#### **PACKAGING:**

In pack size of 100 gm and 500 gm bottles.

# STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

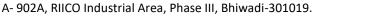
#### REFERENCES

- 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.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only Revision: 08 Nov., 2019

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