

Product Data Sheet

STARCH AGAR Product No. GB-DCM-00031-1A

INTENDED USE

For detection of starch hydrolysing microorganisms.

PRODUCT SUMMARY

Starch Agar was formulated by Vedder in 1915, for the cultivation of Neisseria. Since then, other media have been developed that are superior to Starch Agar for the isolation of Neisseria species, including enriched GC Medium Base. Starch Agar is recommended for the detection of starch hydrolyzing microorganisms from foods and clinical samples. Although the medium was originally formulated to perform the test for the identification of Bacillus cereus, it can be applied to any kind of microorganism where starch hydrolysis activity is required to be analyzed.

Product Specifications

Ingredients	Gms / Ltr		
Peptone	5.000		
Sodium chloride	5.000		
Yeast extract	1.500		
Beef extract	1.500		
Starch, soluble	2.000		
Agar	15.000		

PRINCIPLE

Peptone, yeast extract and Beef extract extract provide nitrogenous compounds, carbon, sulphur, trace elements etc. to the microorganisms. Sodium chloride maintains osmotic equilibrium. Flood the surface of 48 hours 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. Size of the clear zone is directly proportional to the starch hydrolyzing activity of the strain under study.

INSTRUCTION FOR USE

- Dissolve 30 grams in 1000 ml purified/ distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C. Mix well and pour into sterile Petri plates.



UALITY CONTROL SPECIFICATIONS Appearance of Powder :

Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium:

Yellow coloured slightly opalescent gel forms in Petri plates. 7.4 \pm 0.2

pH (at 25°C) :

Microorganism	ATCC	lnoculum (CFU/ml)	Growth	Recovery	Starch hydrolysis(on addition of lodine solution)	Incubation Temperature	Incubation Period
Bacillus subtilis subsp. spizizenni	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	35-37°C	18-48 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Luxuriant	>=70 %	Negative reaction	35-37°C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70 %	Negative reaction	35-37°C	18-48 Hours

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.

This product is for research use only.

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