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PRODUCT DATA SHEET

CHROMOGENIC BACILLUS AGAR TM 1523

INTENDED USE

For isolation & differentiation between various species of *Bacillus* using chromogenic substrates.

COMPOSITION

Ingredients	Gms/Ltr
Agar	15.000
Sodium chloride	10.000
D-Mannitol	10.000
Peptic digest of animal tissue	10.000
Chromogenic mixture	3.200
Meat extract	1.000
Phenol red	0.025

PRODUCT SUMMARY AND EXPLAINATION

CHROMOGENIC BACILLUS AGAR is used for isolation & differentiation between various species of *Bacillus* using chromogenic substrates. The selectivity of the medium has been optimized to prevent the over-growth of the interfering flora and to allow an easy interpretation of the results even when highly contaminated samples with competitive flora are analyzed. Chromogenic Bacillus Agar is based on the formulation of MYP Agar formulated by Mossel et al used for enumeration of *Bacillus cereus* and *Bacillus thuringiensis* when present in large number in certain foodstuffs.

PRINCIPLE

The medium contains peptic digest of animal tissues and Meat extract which provides nitrogenous compounds. Mannitol serves as the fermentable carbohydrate, fermentation of which can be detected by the pH indicator phenol red. Mannitol fermenting organisms like *B. megateruim* yield yellow coloured colonies. The chromogenic mixture present in the medium is cleaved by the enzyme β-glucosidase found in *B. cereus* resulting in the formation of blue colonies. *B. thuringiensis* will also grow as blue/green colonies on this medium as *B. cereus* and *B. thuringiensis* are biochemically identical. If selective isolation of *B. cereus* or *B. thuringiensis* is required aseptically add polymyxin B.

INSTRUCTIONS FOR USE

1. Dissolve 49.22 gm in 1000 ml distilled water.
2. Boil to dissolve the medium completely.
3. Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

4. Cool to 45-50°C and aseptically add rehydrated contents of 1 vial of Polymyxin B Selective Supplement (TS 058) if desired.
5. Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance Dehydrated powder: Light yellow to pink colour, free flowing powder.
Appearance of the prepared medium: Red coloured, clear to slightly opalescent gel.

pH (at 25°C): 7.1 ± 0.2

CULTURE RESPONSE

Cultural characteristics observed after inoculating incubation at 30° C and 44°C for 24 - 48 hours.

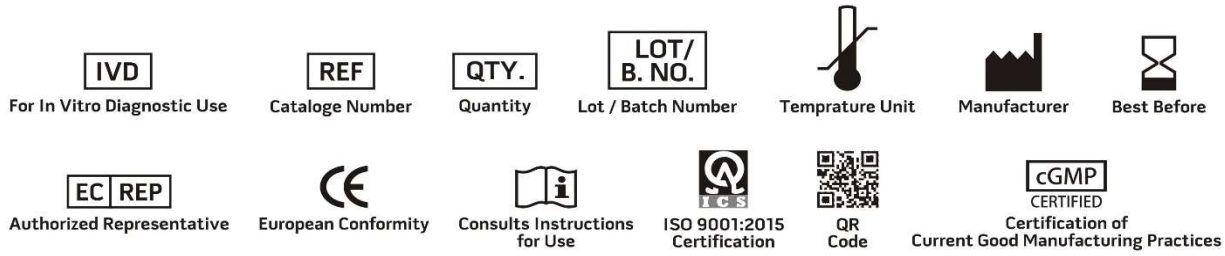
Organism	ATCC	Inoculum (CFU/ml)	Growth with supplement	Growth without supplement	Colour of Colony
Bacillus cereus	10876	50 - 100	Good - Luxuriant	Good-Luxuriant	Light blue, large, flat colonies with blue centre
Bacillus subtilis	6633	50 – 100	Inhibited	Fair	yellowish green to green colonies
Bacillus coagulans	7050	50 – 100	Inhibited	Good-Luxuriant	pink, small, raised colonies
Bacillus megaterium	14581	50 – 100	Inhibited	Good-Luxuriant	yellow, mucoid colonies
Staphylococcus aureus	25923	50 - 100	Inhibited	Good-Luxuriant	yellow colonies

STORAGE & STABILITY

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 8°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.

REFERENCES

1. P.R. Mortimer, G. McCann, Lancet, 1043. (1974).
2. E. Bouza, S. Grant, C. Jordan, et. al, Arch. Ophthamol., 97, 488. (1979).
3. K. Wohlgemuth, C.A. Kirkbride, E.J. Bicknell, R.P. Ellis, Am. Vet. Met, Ass., 161, 1691. (1972)



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.