SPAN Chemie
An ISO 9001:2015 Certified Company

PRODUCT DATA SHEET

CM 20462 - CHROMOGENIC MM AGAR

INTENDED USE

For identification and differentiation of Salmonella and non-Salmonella from water and clinical samples.

PRODUCT SUMMARY AND EXPLANATION

Chromogenic MM Agar was formulatedbyMiller and Mallison for specific isolation and detection of Salmonellae. This medium is superior to XLT4 Agar in supportinggrowth of Salmonella due to the presence of appropriate proportion of four sugars. Most differential and selective mediaare formulated with one or more sugars and pH indicators respectively. The utilization of sugars by organisms results in pH-changes. This is used as a means of distinguishing Salmonella from competing bacteria on the basis of colony colour. Salmonella usually are unable to ferment these sugars that support growth of competing bacteria. Thus other bacteria tend to overgrow Salmonellae, masking their presence.

COMPOSITION

Ingredients	Gms / Ltr 15.000
Agar	10.000
Peptic digest of animal tissue	10.000
Lactose	6.600
Chromogenic mixture	3.000
D-Cellobiose	2.000
Beef extract	1.330
D-Trehalose	1.200
D-Mannitol	

PRINCIPLE

Theinclusion of sugars like mannitol, cellobiose and trehalose stimulate the better initial growth of Salmonella cells. However, the low concentrationsof these sugars do not interfere with the utilization of protein and H_2S production. Presence of lactose suppressesHS_2production by non-salmonellae like Citrobacter freundii. The chromogenic mixture, present in this medium helps todifferentiate between lactose fermenters and non-fermenters. Lactose fermenters give bluish green coloured colonies,which would have been impossible to differentiate with an indicator based on pH change. Peptic digest of animal tissue andbeef extract provide essential nitrogen compounds. Agar is the solidifying agent.

INSTRUCTIONFOR USE

- Dissolve 49.13 grams in 1000 ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45-50°C.
- Pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of powder : Cream to yellow homogeneous free flowing powder
Appearance of prepared medium : Light amber coloured, slightly opalescent gel
pH (at 25°C) : 7.6±0.2

INTERPRETATION

Cultural characteristics observed after an incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of colony	Recovery	Incubation Temp.	Incubation Period
Citrobacter freundii	8090	50-100	Good-Luxuriant	Colourless may show bluish green colour on prolonged incubation	>=50%	35± 2°C	18 - 24 Hours
Enterococcus faecalis	29212	≥ 1000	Inhibited	----	0%	35± 2°C	18 - 24 Hours
Escherichia coli	25922	50-100	Luxuriant	Light blue	>=50%	35± 2°C	18 - 24 Hours
Salmonella typhimurium	14028	50-100	Luxuriant	Black centered	>=50%	35± 2°C	18 - 24 Hours
Salmonella enteritidis	13076	50-100	Luxuriant	Black centered	>=50%	35± 2°C	18 - 24 Hours
Pseudomonas aeruginosa	27853	50-100	Good-Luxuriant	Colourless	>=50%	35± 2°C	18 - 24 Hours

PACKAGING:

Inpacksizeof100gm & 500gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°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.

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

DISPOSAL

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

REFERENCES

1. Miller R.G. and Mallison E.T., 2000, J. Food Protection, 63(10), 1443-46.
2. Miller R.G., Tate C.R., Mallinson E.T. and Scherrer J.A., 1991, PaultSa 70:2429-32.

GMP	IVD	QTY.	LOT/ B. NO.	REF	
Good Manufacturing Practices Certified	For In Vitro Diagnostic Use	Quantity	Lot / Batch Number	Catalogue Number	Manufacturer
	EC REP MedNet GmbH Borkstrasse 10, 48163 Muenster, Germany	CE			
Temprature Unit	Authorized Representative	European Conformity	QR Code	Consults Instructions for Use	Best Before

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

*ForLabUse Only