Soya Peptone Yeast Extract Agar

M935

Intended Use:

Recommended for selective isolation of dermatophytes especially *Trichophyton verrucosum* and other pathogenic fungi.

Composition**

Ingredients	g / L
Soya peptone	10.000
Yeast extract	5.000
Dextrose (Glucose)	40.000
Streptomycin sulphate	0.030
Chloramphenicol	0.050
Agar	17.000
Final pH (at 25°C)	6.6±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 72.08 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at Δ118°C for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Δ Corresponds to 12 lbs pressure.

Principle And Interpretation

Dermatophytes are a group of parasitic fungi requiring keratin for growth. They have an ability to infect and survive on the top layer of skin, having dead cells thereby causing superficial infection of skin, hair and nails.

Dermatophytes include *Epidermophyton, Microsporum* and *Trichophyton.* The organisms colonize the keratin tissues and inflammation is caused by host response to metabolic byproducts. McDonough and Georg et.al (1,2) recommended addition of antibiotics, chloramphenicol and streptomycin to inhibit bacterial growth and assist primary isolation of dermatophytes and fungi.

The medium contains soya peptone, yeast extract and dextrose, all of which provide essential nutrients for the fungal growth. Chloramphenicol and streptomycin have inhibitory action on bacteria (3,4). Temperature of incubation may affect the sensitivity of certain systemic pathogenic fungi to chloramphenicol (5). It is therefore recommended that incubation should be carried out at 25-30°C.

Type of specimen

Clinical samples - skin scrapings, hair and nail scrapings.

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (6,7).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/ eye protection / face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets

Limitations :

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.

Temperature of incubation may affect the sensitivity of certain systemic pathogenic fungi to chloramphenicol (5).

It is therefore recommended that incubation should be carried out at 25-30°C.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

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Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.7% Agar gel.

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 7.2% w/v aqueous solution at 25°C. pH : 6.6±0.2

pH

6.40-6.80

Cultural Response

Cultural characteristics observed after an incubation at 25-30°C for 48-72 hours.

Organism	Inoculum (CFU)	Growth	Recovery
Candida albicans ATCC 10231 (00054*)	50-100	good-luxuriant	>=50%
Staphylococcus aureus subsp. *aureus* ATCC 29213 (00131*)	>=10^4	inhibited	0%
Trichophyton verrucosum ATCC 36058		good-luxuriant	

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store dehydrated and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (6,7).

Reference

1. McDonough E. S., Ajello L., Georg L. K., Brinkman S., 1960, Mycopath. Mycolog. Appl., 13:113.
2. McDonough E. S., Ajello L., Georg L. K., Brinkman S., 1960, J. Lab and Clin. Med; 55: 116.
3. Cooke W. B., 1954, Antibiot. and Chemother, 4:657.
4. Georg L. K., Ajello L., Papageorge C., 1954, J. Lab and Clin. Med., 44: 422.
5. Robinson H. M., Cohen M. M., Robinson R. C. V. and Bereston E. S., 1956, J. Am. Med. Assoc; 160:537.
6. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
7. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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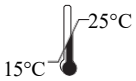
HiMedia Laboratories Pvt. Limited,
Plot No.C-40, Road No.21Y,
MIDC, Wagle Industrial Area,
Thane (W) -400604, MS, India

IVD ***In vitro*** **diagnostic medical device**



Storage temperature

EC REP CEpartner4U, Esdoornlaan 13,
3951DB Maarn, NL
www.cepartner4u.eu

CE Marking

Do not use if package is damaged

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