

Technical Information

ISP Medium No. 3

Product Code: DM 1358

Application: ISP Medium No. 3 is used for the cultivation and characterization of *Streptomyces* species as per International Streptomyces Project.

Composition**

Ingredients	Gms / Litre
Oat Meal	20.000
*Trace salt solution (ml)	1.000
Agar	18.000
1ml of Trace salt solution contains	-
Ferric sulphate heptahydrate	0.001
Manganese chloride tetrahydrate	0.001
Zinc sulphate heptahydrate	0.001
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

ISP Medium No. 3 is based on the original formula of Shirling and Gottlieb ⁽¹⁾. The medium is often referred to as Oat Meal Agar. Oatmeal provides the necessary nutrients for growth of *Streptomyces*. The trace salts solution that constitutes ferric sulphate, manganese chloride and zinc sulphate provides the essential electrolytes and minerals. The concentration of these salts used per litre in the medium is 1.0 mg (concentration of 0.1 mg%). Inoculate ISP Medium No.1 (DM1356) with the test organisms and incubate at 30°C ± 0.2 for upto 96 hours. Inoculate the plates of ISP Medium No. 3 by streaking, using 0.1 ml of this test culture inoculum.

Methodology

Suspend 38 grams of powder media in 1000 ml distilled water. Shake well and heat to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and mix intermittently while pouring into sterile Petri plates for even distribution of oatmeal.

Quality Control

Physical Appearance

Cream to beige homogeneous free flowing powder

Gelling

Firm, comparable with 1.8% Agar gel

Colour and Clarity of prepared medium

Very light amber coloured opalescent gel with precipitation forms in Petri plates.

Reaction

Reaction of 3.8% w/v aqueous solution at 25°C. pH : 7.3±0.2

pH Range 7.10-7.50

Cultural Response/Characteristics

DM1358: Cultural characteristics observed after an incubation at 35-37°C for 48-72 hours.



Dehydrated Culture Media
Bases / Media Supplements

Organism

Streptomyces achromogenes ATCC 12767
Streptomyces albus subsp Albus ATCC 3004
Streptomyces lavendulae ATCC 8664

Growth

Good-Luxuriant
Good-Luxuriant
Good-Luxuriant

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

Prepared Media: 2-8⁰ in sealable plastic bags for 2-5 days.

Further Reading

1. Shirling E. B. and Gottlieb D., 1966, International J. of Systemic Bacteriol., Vol.16(3): 313.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specificatons for identity and performens parameters.

