

## Technical Information

### ISP Medium No. 6 (Peptone Yeast Extract Iron Agar)

#### Product Code: DM 1361

**Application:** ISP Medium No. 6 (Peptone Yeast Extract Iron Agar) is recommended for the cultivation and maintenance of *Streptomyces* species as per International Streptomyces Project.

#### Composition\*\*

Ingredients	Gms / Litre
Peptic digest of animal tissue	15.000
Proteose peptone	5.000
Yeast extract	1.000
Ferric ammonium citrate	0.500
Dipotassium phosphate	1.000
Sodium thiosulphate	0.080
Agar	15.000
Final pH ( at 25°C)	6.7±0.2

\*\*Formula adjusted, standardized to suit performance parameters

#### Principle & Interpretation

ISP Medium No. 6 (Peptone Yeast Extract Iron Agar) is recommended by International Streptomyces Project for the cultivation and maintenance of *Streptomyces* species<sup>(1, 2)</sup>. Peptic digest of animal tissue, proteose peptone and yeast extract provide carbon, nitrogen, sulphur, vitamin B complex and other essential growth nutrients. Dipotassium hydrogen phosphate gives the medium good buffering capacity. Ferric ammonium citrate and sodium thiosulphate together serve as hydrogen sulphide indicator system.

#### Methodology

Suspend 37.58 grams of powder media in 1000 ml distilled water. Shake well & heat to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plates.

#### Quality Control

##### Physical Appearance

Cream to yellow homogeneous free flowing powder

##### Gelling

Firm, comparable with 1.5% Agar gel

##### Colour and Clarity of prepared medium

Yellow coloured, clear to slightly opalescent gel forms in Petri plates

##### Reaction

Reaction of 3.76% w/v aqueous solution at 25°C. pH : 6.7±0.2

##### pH Range 6.50-6.90

##### Cultural Response/Characteristics

DM1361: Cultural characteristics observed after an incubation at 30-32°C for 18-48 hours



Dehydrated Culture Media  
Bases / Media Supplements

Organism	Growth
<i>Streptomyces lavendulae</i> ATCC 8664	Good-Luxuriant
<i>Streptomyces achromogenes</i> ATCC 12767	Good-Luxuriant
<i>Streptomyces albus subsp albus</i> ATCC 3006	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:** 2-8<sup>0</sup> in sealable plastic bags for 2-5 days.

## Further Reading

1. Shirling E. B., and Gottlieb D., 1966, Methods for Characterization of Streptomyces species, Int. J. Syst. Bacteriol., 16: 313.
2. Atlas R. M., 1993, Handbook of Microbiological Media, Parks, L.C., (Ed.), CRC Press, Inc.

## Disclaimer :

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