



Dehydrated Culture Media  
Bases / Media Supplements

## Technical Information

### Standard Infusion Agar

#### Product Code: DM 1883

**Application:** - Standard Infusion Agar is a nutritive medium used for mass cultivation of organisms for vaccine or toxin production.

#### Composition\*\*

Ingredients	Gms / Litre
Peptone	15.000
HM infusion B from #	5.000
Sodium chloride	5.000
Agar	25.000
Final pH ( at 25°C)	7.5±0.2

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

# Equivalent to Beef infusion from

#### Principle & Interpretation

The principles of cultivation of bacteria were laid down in the late 1870's by Robert Koch. Since that time bacteriologists could study systematically the diseases caused by bacteria, isolate the causative agents in pure culture and make themselves familiar with their nature. With the aid of the culture technique they could produce therapeutic sera and prophylactic vaccines. Standard Infusion Agar supports luxuriant growth of a variety of bacteria. This medium is thus recommended for large-scale cultivation of bacteria for the purpose of vaccine and toxin production. Standard Infusion Agar has composition similar to HM Peptone B Agar (ATCC Medium 225) (1). Standard Infusion Broth, having a composition similar to Standard Infusion Agar is recommended as highly nutritious media for the cultivation of wide variety of microorganisms (2).

Peptone and HM infusion B from provide nitrogen and carbon source, long chain amino acids sulphur, vitamins and other growth nutrients for luxuriant growth of organisms. Sodium chloride maintains the osmotic equilibrium.

#### Type of specimen

Clinical samples ; Food and dairy samples ; Water samples

#### Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3, 4).

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (5, 6, 7).

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards (8).

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

#### Warning and Precautions

In Vitro diagnostic 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

This medium is general purpose medium and may not support the growth of fastidious organisms.





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### 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.

## Methodology

Suspend 50 grams of dehydrated powder media in 1000 ml distilled water. Mix thoroughly & heat to boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Shake well before pour into sterile Petri plates.

## Quality Control

### Appearance

Cream to yellow homogeneous free flowing powder

### Gelling

Firm, comparable with 2.5% Agar gel.

### Colour and Clarity

Yellow coloured clear to slightly opalescent gel forms in Petri plates

### Reaction

Reaction of 5.0% w/v aqueous solution at 25°C. pH : 7.5±0.2

### pH Range

7.30-7.70

### Cultural Response

DM1883: Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery
<i>Escherichia coli</i> ATCC 25922 (00013*)	50-100	luxuriant	>=70%
<i>Pseudomonas aeruginosa</i> ATCC 27853 (00025*)	50-100	luxuriant	>=70%
<i>Salmonella Typhi</i> ATCC 6539	50-100	luxuriant	>=70%
<i>Staphylococcus aureus</i> ATCC 25923 (00034*)	50-100	luxuriant	>=70%

Key : \*Corresponding WDCM numbers.

## Storage and Shelf Life

**Dried Media:** Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°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. Use before expiry date on the label. 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 (3,4).





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## Further Reading

1. Atlas R. M., 1993, Handbook of Microbiological Media, CRC Press. Inc.
2. Cruickshank R., Duguid J. P., Marmion B. P., Swain R. H. A., (Eds.), 1975, Medical Microbiology, The Practice of Medical Microbiology, 12th Edition, Vol. II, Churchill Livingstone.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2<sup>nd</sup> Edition.
4. 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.
5. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
6. Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
7. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed. APHA Inc., Washington, D.C.
8. Greenberg A. E., Clesceri L. S. and Eaton A. D., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st ed., APHA, Washington, D.C.

## 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.
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