



## HI Powder

RM191

### Principle And Interpretation

HI Powder is manufactured under controlled conditions to meet the nutritional demands of highly fastidious microorganisms. It is rich in amino acids, peptides and other nutrients. Used in media employed for cultivation of fastidious organisms, like Brucella species, Mycoplasma, Pneumococci, Gonococci, Meningococci, Actinomycetes, fungi, etc. and mass cultivation of microorganisms for the preparations of vaccines and antibiotic sensitivity test. It is equivalent to Heart Infusion Powder.

### Quality Control

#### Appearance

Light yellow to brownish yellow homogenous free flowing powder, having characteristic odour but not putrescent.

#### Solubility

Freely soluble in distilled/purified water, insoluble in alcohol and ether.

#### Clarity

1% w/v aqueous solution remains clear without haziness after autoclaving at 15 lbs pressure (121°C) for 15 minutes.

#### Reaction

Reaction of 2% w/v aqueous solution at 25°C.

#### pH

6.70- 7.10

#### Microbial Load:

##### Total aerobic microbial count (cfu/gm)

By plate method when incubated at 30-35°C for not less than 3 days.

Bacterial Count : <= 2000 CFU/gram

##### Total Yeast and mould count (cfu/gm)

By plate method when incubated at 20-25°C for not less than 5 days.

Yeast & mould Count : <= 100 CFU/gram

#### Test for Pathogens

1. *Escherichia coli*-Negative in 10 gms of sample 2. *Salmonella* species-Negative in 10 gms of sample 3. *Pseudomonas aeruginosa*- Negative in 10 gms of sample 4. *Staphylococcus aureus*- Negative in 10 gms of sample 5. *Candida albicans*- Negative in 10 gms of sample 6. *Clostridia*- Negative in 10 gms of sample

#### Indole Test

Tryptophan content: Passes

#### Cultural response

Cultural response observed after incubation at 35 - 37°C for 18-48 hours by preparing Mueller Hinton Agar (M173), using HI Powder as an ingredient.

#### Cultural Response

Organism	Growth
<b>Cultural response</b> <i>Escherichia coli</i> ATCC 25922	Luxuriant
<i>Haemophilus influenzae</i> ATCC 49247	Good - luxuriant (on Mueller Hinton Chocolate Agar)
<i>Neisseria gonorrhoeae</i> ATCC 49226	Luxuriant
<i>Pseudomonas aeruginosa</i> ATCC 27853	Luxuriant
<i>Staphylococcus aureus</i> ATCC 25923	Luxuriant
<i>Enterococcus faecalis</i> ATCC 29212	Luxuriant

*Streptococcus pneumoniae* luxuriant (on Mueller Hinton Blood Agar)  
ATCC 6305

### Chemical Analysis

Total Nitrogen	$\geq 12.0\%$
AminoNitrogen	$\geq 3.50\%$
Sodium chloride	$\leq 5.50\%$
Loss on drying	$\leq 5.0\%$
Residue on ignition	$\leq 12.0\%$
Calcium(Ca)	$\leq 0.02\%$
Magnesium(Mg)	$\leq 0.11\%$

### Storage and Shelf Life

Store between 10-30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.



#### Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories 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 or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. 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.