



Dehydrated Culture Media  
Bases / Media Supplements

## Technical Information

### Brain Heart Infusion Broth with 6.5 % NaCl

#### Product Code: DM 2037

**Application:** - Brain Heart Infusion Broth with 6.5 % NaCl is highly nutritious medium employed for the selective cultivation of salt tolerant microorganisms.

#### Composition\*\*

Ingredients	Gms / Litre
Calf brain, infusion from	200.000
Beef heart, infusion from	250.000
Proteose peptone	10.000
Dextrose	2.000
Sodium chloride	65.000
Disodium phosphate	2.500
Final pH ( at 25°C)	7.4±0.2

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

#### Principle & Interpretation

Brain Heart Infusion Medium is useful for cultivating a wide variety of microorganisms since it is a highly nutritive medium. This medium is a modification of the original formulation of Rosenow, where he added pieces of brain tissues to dextrose broth <sup>(1)</sup>.

Brain Heart Infusion Broth with 6.5 % NaCl is used for the selective cultivation of salt tolerant microorganisms. High concentration of sodium chloride acts as a differential and/or selective agent by interfering with membrane permeability and osmotic and electro kinetic equilibrium as far as salt intolerant organisms are concerned. Proteose peptone and infusions (calf brain and beef heart) serve as sources of carbon, nitrogen, essential growth factors, amino acids and vitamins. Dextrose serves as a source of energy. Disodium phosphate helps in maintaining the buffering action of the medium.

#### Methodology

Suspend 97 grams of powder media in 1000 ml distilled water. Dispense into bottles or tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. For best results, the medium should be used on the day it is prepared, otherwise, it should be boiled or steamed for a few minutes and then cooled before use.



## Quality Control

### Physical Appearance

Cream to yellow homogeneous free flowing powder

### Colour and Clarity of prepared medium

Light amber coloured, clear solution without any precipitate

### Reaction

Reaction of 9.7% w/v aqueous solution at 25°C. pH : 7.4±0.2

### pH Range

7.20-7.60

### Cultural Response/Characteristics

DM2037: Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Organism	Inoculum (CFU)	Growth
<i>Staphylococcus aureus</i> ATCC 25923	50-100	good-luxuriant
<i>Neisseria meningitides</i> ATCC 13090	$\geq 10^3$	Inhibited
<i>Streptococcus pneumoniae</i> ATCC 6303	$\geq 10^3$	inhibited
<i>Streptococcus pyogenes</i> ATCC 19615	$\geq 10^3$	inhibited

## Further Reading

1. Rosenow, 1919, J. Dental Research, 1:205.

## 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
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