

Product Data Sheet

BLOOD AGAR BASE NO. 2 (ISO 11290-1:2017)
Product No. GB-DCM-00118-1A

INTENDED USE

For isolation, cultivation and detection of haemolytic activity of Streptococci, Pneumococci and other fastidious microorganisms.

PRODUCT SUMMARY

Blood Agar Base No.2 is a basal medium rich in nutritional properties and is used for the preparation of blood agar plates. It is used for the isolation, cultivation and recovery of fastidious microorganisms to study hemolysis activity. Microorganisms producing haemolysis give visible haemolytic zones on this medium. This medium can be used to prepare a selective medium for Brucella spp or Campylobacter spp by adding an antibiotic supplement. It may also be used for the primary isolation of Haemophilus spp.by adding horse blood to enrich the medium. This medium has been recommended by ISO normative 7932 for the confirmation of Bacillus cereus. It is also a medium recommended by ISO normative 11290-1 for the confirmation of Listeria monocytogenes.

Product Specifications

Ingredients	Gms / Ltr		
Proteose peptone	15.000		
Liver extract	2.500		
Yeast extract	5.000		
Sodium chloride	5.000		
Agar	15.000		

PRINCIPLE

The medium contains Liver extract which helps to enhance the growth and haemolytic reactions of fastidious organisms like Streptococci and Pneumococci. Proteose peptone serves as the nitrogen source while yeast extract provides essential carbon, vitamin, nitrogen, amino acid sources. Sodium chloride maintains the osmotic equilibrium. Agar act as solidifying agent. Supplementation with blood (5-10%) provides additional growth factors and also serves as basis for determining haemolytic reactions. Haemolytic patterns may vary with the source of animal blood or type of base medium used.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Haemolysis	Incubation Temperature	Incubation Period
Neisseria meningitidis	13090	50-100	Luxuriant	>=70%	None	35-37°C	18 – 48 Hours
Staphylococcus aureus	6538	50-100	Luxuriant	>=70%	Beta	35-37°C	18 – 48 Hours
Streptococcus pneumoniae	6303	50-100	Luxuriant	>=70%	Alpha	35-37°C	18 – 48 Hours
Streptococcus pyogenes	19615	50-100	Luxuriant	>=70%	Beta	35-37°C	18 – 48 Hours

INSTRUCTION FOR USE

- Dissolve 21.25 grams in 500ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121oC) for 15 minutes.
- Cool the medium to 40 50°C.
- Aseptically add 5% v/v sterile defibrinated blood and pour into sterile Petri plates.

Note:

For Brucella species: Add rehydrated contents of 1 vial of Brucella Selective Supplement to 500 ml sterile molten base.

For Campylobacter species: Add rehydrated contents of 1 vial of Campylobacter Supplement - I or Campylobacter Supplement - III on Campylobacter Supplement - III on Campylobacter Supplement - III on Campylobacter Growth Supplement to 500 ml sterile molten base.

For Streptococcus species: Add rehydrated contents of 1 vial of Strepto Supplement to 500 ml sterile molten base. Mix well and pour into sterile Petri plates.



QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium:

Basal medium : Yellow colored, clear to slightly opalescent gel

After addition of sterile defibrinated blood : Cherry red colour, opaque gel

pH (at 25°C): 7.4±0.2

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

This product is for research use only.