CM 20273 – BLOOD AGAR BASE W/ LOW pH

INTENDED USE

For isolation and cultivation of fastidious organisms after addition of blood.

PRODUCT SUMMARY AND EXPLANATION

BloodAgar Base isa highly nutritious medium generally used as a basal medium for preparing blood agar by supplementation with blood. It can also be used as general-purpose media without the addition of blood. If the culture medium is to be used without addition of blood, the pH should be adjusted to 7.2 to 7.4, since most bacteria can grow better in a slightly alkaline medium. The low pH of Blood Agar Base w/ low pH (pH 6.8) stabilizes the red blood corpuscles and favors the formation of clear zone of haemolysis. Also it is advantageous for cultivation of Streptococci and Pneumococci Blood Agar Base media can be used with added phenolphthalein phosphate for the detection of phosphate producing staphylococci, with added salt and agar for assessment of surface contamination on equipment and pig carcass and to determine salinity range of marine Flavobacteria. It can also be used for preparation of Salmonella Typhi antigens. Addition of blood makes the medium more nutritious by providing additional growth factors required by fastidious organisms. It also helps in visualizing the haemolytic reactions. However, haemolytic reactions depend on the animal blood used. Sheep blood gives best results for Group A Streptococci. But sheep blood fails to support growth of Haemophilus haemolyticus since sheep blood is deficient in pyridine nucleotides. However when horse blood is used H.haemolyticus colonies produce haemolysis and mimic Streptococcus pyogenes.

COMPOSITION

Ingredients	Gms / Ltr
Beef heart, infusion from	500.000
Tryptose	10.000
Sodium chloride	5.000
Agar	15.000

PRINCIPLE

Beefheart,infusion from from and tryptose provides carbon, nitrogen, amino acids and vitamins. Sodium chloride helps in maintaining the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

Dissolve 40.00 gramsin 1000 ml purified/distilled water.
Heat to boiling to dissolve the medium completely.
Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
Cool to 45-50°C and aseptically add 5% v/v sterile defibrinated blood.
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: Light amber coloured clear to slightly opalescent gel. After addition of 5-7% v/v sterile defibrinated blood : Cherry red coloured opaque gel forms in Petri plates.
pH (at 25°C)	: 6.8±0.2

INTERPRETATION

Cultural characteristics observed after incubation with added 5% w/v sterile defibrinated blood.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth w/o blood	Recovery w/o blood	Growth with blood	Recovery with blood	Incubation Temperature	Incubation Period
Neisseria meningitidis	13090	50-100	Fair-good	20-40%	Luxuriant	>=70%	35-37°C	18-48 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good	40-50%	Luxuriant	>=70%	35-37°C	18-48 Hours
Staphylococcus epidermidis	12228	50-100	Good	40-50%	Luxuriant	>=70%	35-37°C	18-48 Hours
Streptococcus pneumoniae	6303	50-100	Fair-good	20-40%	Luxuriant	>=70%	35-37°C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Fair-good	20-40%	Luxuriant	>=70%	35-37°C	18-48 Hours

PACKAGING:

Inpacksizeof100 gm and 500 gm bottles.

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

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

REFERENCES

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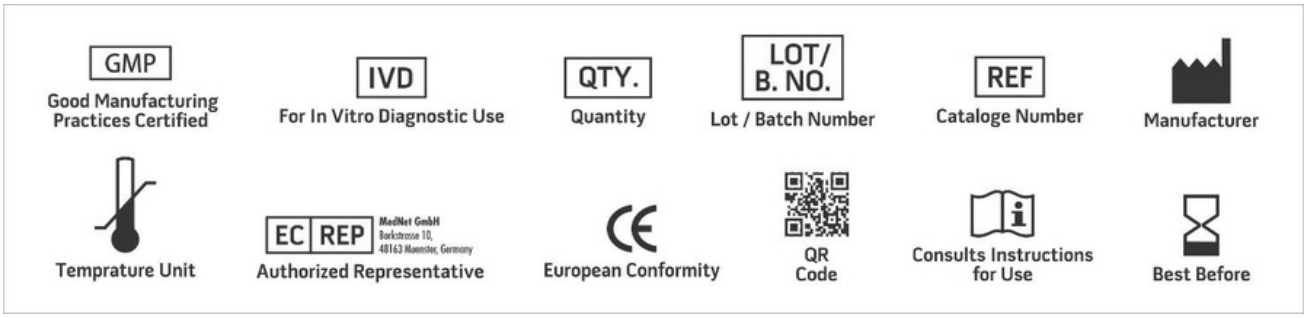

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only