

TMV 360 – BLOOD AGAR BASE (INFUSION AGAR) (VEG.)

INTENDED USE

For isolation and cultivation of fastidious pathogenic microorganisms after addition of blood.

PRODUCT SUMMARY AND EXPLANATION

Blood Agar Base, Veg / with low pH, Veg is prepared by using Veg hydrolysate No.1 and Veg infusion, thus making the media free of BSE/TSE risks. These media are used as a base for preparation of blood agar. Blood Agar Base, Veg / with low pH, Veg are highly nutritious media and can also be used as a general purpose growth media without adding blood. If the culture medium base is to be used without blood, the pH should be adjusted to 7.2 to 7.4 since most bacteria can grow better in a slightly alkaline medium. The pH value of 6.8 stabilizes the red blood corpuscles and favours the formation of clear zone of haemolysis and is advantageous for cultivation of Streptococci and Pneumococci. These media like the conventional media can be used with added phenolphthalein phosphate for the detection of phosphatase producing Staphylococci, with added salt and agar for assessment of surface contamination on equipment and pig carcasses and to determine salinity range of marine flavobacteria. It can be used for preparation of *S. serotype* Typhi antigens. This medium can be further enriched with added serum or blood. With added blood it is suitable for detection of typical haemolytic reactions. However, haemolytic reactions depend on the animal blood used. Sheep blood gives best results for Group A Streptococci. When horse blood is used, *Haemophilus haemolyticus* colonies produce haemolysis and mimic *Streptococcus pyogenes*.

COMPOSITION

Ingredients	Gms / Ltr
Veg infusion	10.000
Veg hydrolysate No.1	10.000
Sodium chloride	5.000
Agar	15.000

PRINCIPLE

Veg infusion and Veg hydrolysate No. 1 provides nitrogen, carbon, amino acids and vitamin sources. Sodium chloride maintain osmotic equlibrium.

INSTRUCTION FOR USE

- Dissolve 40.0 grams in 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 : Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing

powder.

Appearance of prepared medium : Basal medium yields light amber coloured clear to slightly opalescent gel.

Addition of 5% v/v sterile defibrinated blood yields cherry red opaque gel in

petri plates.

pH (at 25°C) : 7.3±0.2











INTERPRETATION

Cultural characteristics observed after incubation.

Microorganis m	ATCC	Inoculum (CFU/ml)	Growth w/o blood	Recovery w/o blood	Growth with blood	Recovery with blood	Haemolysi s	Incubation Temperat ure	Incubati on Period
Neisseria meningitidis	13090	50-100	Fair	20-30%	Luxuriant	>=70%	None	35-37°C	18-48 Hours
Staphylococcu s aureus subsp. aureus	25923	50-100	Good	40-50%	Luxuriant	>=70%	Beta	35-37°C	18-48 Hours
Staphylococcu s epidermidis	12228	50-100	Good	40-50%	Luxuriant	>=70%	None	35-37°C	18-48 Hours
Streptococcus pneumoniae	6303	50-100	Fair-good	20-40%	Luxuriant	>=70%	Alpha	35-37°C	18-48 Hours
Streptococcus pyogenes	19615	50-100	Fair-good	20-40%	Luxuriant	>=70%	Beta	35-37°C	18-48 Hours

PACKAGING:

In pack size of 100 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

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

REFERENCES

- 1. Norton, J.F. Bacteriology of Plus. J. Lab. clin. Med.; 17; 558 565 (1932)
- 2. Noble W.C., 1962, J. Clin, Path., 15:552. 3. Hansen N.H., 1962, J. Appl. Bact., 25:46.
- 4. Hayes P.R., 1963, J. Gen. Microbiol., 30:1.
- 5. Schuber J.H., Edwards P.R. and Ramsere C.H., 1969, J. Bacteriol., 77:648.
- 6. Snavely J.G. and Brahier J., 1960, Am. J. Clin. Pathol., 33:511.
- 7. Murray PR, Baron, Pfaller and Yolken 2003, In Manual of Clinical Microbiology 8th ed., (Eds.), ASM, Washington, DC.







































NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only

Revision: 08 Nov., 2019







