

1505 - PEPTONE-TBL (Culture Media Ingredient)

INTENDED USE

Peptone-TBL used in the preparation of culture media employed for cultivation of a wide variety of microorganisms.

PRODUCT SUMMARY AND EXPLANATION

Peptone-TBL is used in preparing microbiological culture media and in producing bacterial toxins and also usable in synthetic media in acclimatization of microorganisms in bioreactor studies. It's support to growth of Staphylococci, Streptococci, Pneumococci and also suitable for isolating and cultivating Haemophilus and Neisseria. It is off white to Creamish yellow colour, free flowing powder having characteristic odour but not pungent smell. It is completely soluble in distilled Water, Clear. Insoluble in alcohol.

PRINCIPLE

Peptone-TBL is enzymatic digest of protein used in preparing microbiological culture media and in producing bacterial toxins. Proteose peptone provide nitrogen in a form that is readily available for bacterial growth. It is superior in nutritious of fastidious microorganism.

INSTRUCTION FOR USE

Peptone-TBL is used in media for the production of bacterial toxins. It is used in preparing chocolate agar for propagating of Neisseria species. It is also used for the cultivation of bacteria with high nutritional requirements, as for example Haemophilus, Salmonella, staphylococcus etc. species.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Light yellowish to brownish yellow colour, free flowing powder having characteristic odour but not pungent smell.
Solubility (2% Soln. at 25°C)	:	Completely soluble in distilled Water, Clear. Insoluble in alcohol.
pH (2% Soln. at 25 °C)	:	6.5 – 7.5
Loss on drying (at 105 °C)	:	NMT – 5.0%
Total Nitrogen (DWB)	:	NLT – 12.0%
α-Amino Nitrogen	:	NLT – 2.0%
Total Ash	:	NMT – 15.0%
Chloride (as NaCl)	:	NMT – 5.0%
Indole Test	:	Positive
Microbial Parameter	:	Passes Test
Growth Promotion Test	:	Passes Test

INTERPRETATION

Cultural Characteristic observed after incubation at 35-37°C for 24 hours by using 2% peptone, 0.5% sodium chloride and 1.5% agar in water, pH 7.2-7.4

Microorganism	ATCC	Inoculum (CFU/ml)	Growth
<i>Escherichia coli</i>	8739	50-100	Luxuriant
<i>Pseudomonas aeruginosa</i>	9027	50-100	Luxuriant
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant



<i>Salmonella Typhi</i>	6539	50-100	Luxuriant
<i>Staphylococcus aureus</i>	6538	50-100	Good - Luxuriant
<i>Streptomyces albus</i>	3004	50-100	Good - Luxuriant
<i>Streptococcus pyogenes</i>	19615	50-100	luxuriant w/ beta haemolysis (With addition of sterile 5% sheep blood to above medium, after an incubation at 35-37°C for 48 hours).
<i>Neisseria gonorrhoeae</i>	19624	50-100	luxuriant w/ beta haemolysis (With addition of sterile 10% sheep blood to above medium heated to 80-90°C until blood has turned to chocolate brown and incubated in 10% CO2 atmosphere at 35-37°C for 48 hours).

PACKAGING:

Standard packing is 500gm in plastic bottle. After packing tightly closed in a dry and well-ventilated place.

STORAGE

Keep plastic bottle tightly closed in a dry and well-ventilated place, Store in cool place. 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 plastic bottle after use.

Product Deterioration: Do not use product if any contamination, discoloration or other sign of deterioration is found.

DISPOSAL

After use, contact a licensed professional waste disposal service to dispose of this material. Dispose of as unused product.

REFERENCES

- 1.Kirkbride, Berthelsen and Clark. 1931. Comparative studies of infusion and infusion-free diphtheria toxin in antitoxin production and in standardization by the flocculation, subcutaneous, and intracutaneous tests. J. Immunol. 21:1-20.
2. Hazen and Heller. 1931. Further studies upon the effect of various carbohydrates on production of diphtheria toxin with special reference to its flocculating titer and final pH. J. Bacteriol. 23:195-209.



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

***For Lab Use Only**
Revision: 05th Oct. 2019