

## 1523 - PROTEOSE PEPTONE, (STD) TBL POWDER (Culture Media Ingredient)

### INTENDED USE

Proteose Peptone, (STD) TBL Powder used in the preparation of culture media employed for cultivation of a wide variety microorganisms.

### PRODUCT SUMMARY AND EXPLANATION

Proteose Peptone, (STD) TBL Powder 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

Proteose peptone 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

Proteose Peptone (STD) TBL Powder 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

<b>Appearance</b>	:	Off white to Creamish yellow colour, free flowing powder having characteristic odour but not pungent smell.
<b>Solubility (2% Soln. at 25°C)</b>	:	Completely soluble in distilled Water, Clear. Insoluble in alcohol.
<b>pH (2% Soln. at 25 °C)</b>	:	6.5 – 7.5
<b>Loss on drying (at 105 °C)</b>	:	NMT – 6.0%
<b>Total Nitrogen (DWB)</b>	:	NLT – 12.5%
<b>α-Amino Nitrogen</b>	:	NLT – 3.5%
<b>Total Ash</b>	:	NMT – 10.0%
<b>Chloride (as NaCl)</b>	:	NMT – 5.0%
<b>Indole Test</b>	:	Positive
<b>Proteose Peptide</b>	:	Positive
<b>Microbial Parameter</b>	:	Passes Test
<b>Growth Promotion Test</b>	:	Passes Test

TEST	SOLUTION	ORGANISM	ATCC	RESULT
Hydrogen Sulfide Production	1%	Salmonella Typhimurium	14028	Positive
Indole Production	1%	Escherichia coli	29552	Positive

### INTERPRETATION

Cultural Characteristic observed in 2% Proteose Peptone (STD) TBL Powder and 1.5% agar after incubation at 35-37°C for 18-24 hours



Microorganism	ATCC	Inoculum (CFU/ml)	Growth
<i>Staphylococcus aureus</i>	25923	50-100	Good - Luxuriant
<i>Escherichia coli</i>	25922	50-100	Good - Luxuriant
<i>Streptococcus pneumoniae</i>	27853	50-100	Good - Luxuriant
<i>Clostridium perfringens</i>	6633	50-100	Good - Luxuriant
<i>Enterococcus faecalis</i>	29212	50-100	Good - Luxuriant
<i>Streptococcus pyogenes</i>	19615	50-100	Good - Luxuriant

#### 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

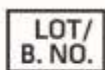
After use, contact a licensed professional waste disposal service to dispose of this material. Dispose of as unused product.

#### 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.



Quantity



Lot / Batch Number



Temperature Unit



Best Before



QR Code



Catalogue No.



Consults Instructions for use :



Manufacturer

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

**\*For Lab Use Only**

Revision: 05<sup>th</sup> Oct. 2019

