

## 3542- PEPTONE- POWDER (Bacteriological Grade)

### INTENDED USE

Peptone Powder is used in culture media for cultivation of a variety of bacteria and fungi, and use for commercial production of enzymes, antibiotics, and other products.

### PRODUCT SUMMARY AND EXPLANATION

Peptone Powder 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 Powder is enzymatic digest of protein used in preparing microbiological culture media and in producing bacterial toxins. 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 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

Appearance	:	Light yellowish to brownish yellow color free flowing powder having characteristic odor but not pungent smell.
Solubility (2% soln. at 25°C)	:	Soluble in distilled water, clear.
Clarity (2% Soln. at 121°C)	:	Clear solution. No ppt.
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 – 1.5%
Total Ash	:	NMT – 10.0%
Chloride (as NaCl)	:	NMT – 5.0%
Microbial Test	:	Passes test

### INTERPRETATION

Cultural Characteristic observed in 2% Peptone Powder (Bacteriological Grade) 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	Luxuriant
<i>Escherichia coli</i>	25922	50-100	Luxuriant
<i>Pseudomonas aeruginosa</i>	27853	50-100	Luxuriant
<i>Bacillus subtilis</i>	6633	50-100	Luxuriant
<i>Salmonella typhi</i>	6539	50-100	Luxuriant
<i>Streptococcus pyogenes</i>	19615	50-100	Luxuriant



## PACKAGING

Standard packing is 500gm in plastic bottle and 25 kg in bag. After packing tightly closed in a dry and well-ventilated place.

## STORAGE

Store at room temperature in cool place, Keep container tightly closed in a dry and well-ventilated place and away from bright light. 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 container tightly 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. Prokofeva, Miroshnichenko, Kostrikina, Chernyh, Kuznetsov, Tourova and Bonch-Osmolovskaya. 2000. Int. J. Syst. Evol. Microbiol. 50: Pt 6:2001.
2. United States Pharmacopeial Convention, Inc. 2001. The United States pharmacopeia 25/The national formulary 20 – 2002. United States Pharmacopeial Convention, Inc., Rockville, Md.
3. Clesceri, Greenberg and Eaton (ed.). 1998. Standard methods for the examination of water and wastewater, 20th ed. American Public Health Association, Washington, DC.
4. U.S. Food and Drug Administration. 1995. Bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, Md.
5. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
6. Horwitz (ed.). 2000. Official methods of analysis of AOAC International , 17th ed. AOAC International, Gaithersburg, Md.
7. U.S. Department of Agriculture. 1998. Microbiology laboratory guidebook, 3rd ed. Food Safety and Inspection Service, USDA, Washington, D.C.
8. Cote. 1999. In Flickinger and Drew (ed.), Encyclopedia of bioprocess technology: fermentation, biocatalysis, and bioseparation. John Wiley & Sons, Inc., New York, N.Y. 10. Bridson and Brecker. 1970. In Norris and Ribbons (ed.), Methods in microbiology, vol. 3A. Academic Press, New York.

QTY.

Quantity

LOT/  
B. NO.

Lot / Batch Number



Temperature Unit



Best Before



QR  
Code

REF

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

