

CM 23985 - MEAT EXTRACT(Type-1) (Bacteriological Grade)

INTENDED USE

MeatExtract(Type-1) are used in preparing microbiological culture media

PRODUCT SUMMARY AND EXPLANATION

Meat Extract(Type-1) is intended to replace aqueous infusion of meat in microbiological culture media. It is frequently used at a concentration of 0.3 to 1.0% in culture media, although concentrations may vary depending on the nutritional requirements for the medium formulation. It may be relied upon for biochemical studies, particularly fermentation reactions, because of its independence from fermentable substances that would interfere with the accuracy of such determinations.

PRINCIPLE

MeatExtract(Type-1) is infusion of beef and provide an undefined source of nutrients. Meat Extract(Type-1) products are not exposed to the harsh treatment used for protein hydrolysis, so they can provide some of the nutrients lost during peptone manufacture. Meat Extract(Type-1) is mixtures of peptides and amino acids, nucleotide fractions, organic acids, minerals and some vitamins. The function of B. Meat Extract(Type-1) products can be described as complementing the nutritive properties of peptone by contributing minerals, phosphates, energy sources and those essential factors missing from peptone.

INSTRUCTION FOR USE

MeatExtract(Type-1) is a dehydrated extract of bovine tissue for use in preparing microbiological culture media in a laboratory setting. Beef Extract Powder is not intended for use in the diagnosis of disease or other conditions in humans. It is prepared and standardized for use in microbiological culture media, where it is generally used to replace infusion of meat. Culture media containing B. Meat extract powder are recommended for use in bacteriological examination of water, milk, and other materials, where uniform composition of media is important. It is relied upon for biochemical studies, particularly fermentation reactions because of its independence from fermentable substances.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Light yellowish to brownish yellow color, free flowing
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 – 6.0%
Total Nitrogen (DWB)	:	NLT – 12.0%
α-Amino Nitrogen	:	NLT – 2.5%
Total Ash	:	NMT – 12.0%
Chloride (as NaCl)	:	NMT – 5.0%
Indole Test	:	Positive
Microbial Test	:	Passes Test

INTERPRETATION

Cultural Characteristic observed in 2% Meat Extract(Type-1) and 1.5% agar after incubation at 35-37°C for 18-24 hours.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth
Staphylococcus aureus	25923	50-100	Good - Luxuriant
Escherichia coli	25922	50-100	Good - Luxuriant



Pseudomonas aeruginosa	27853	50-100	Good - Luxuriant
Bacillus subtilis	6633	50-100	Good - Luxuriant
Enterococcus faecalis	29212	50-100	Good - Luxuriant
Streptococcus pyogenes	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

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.

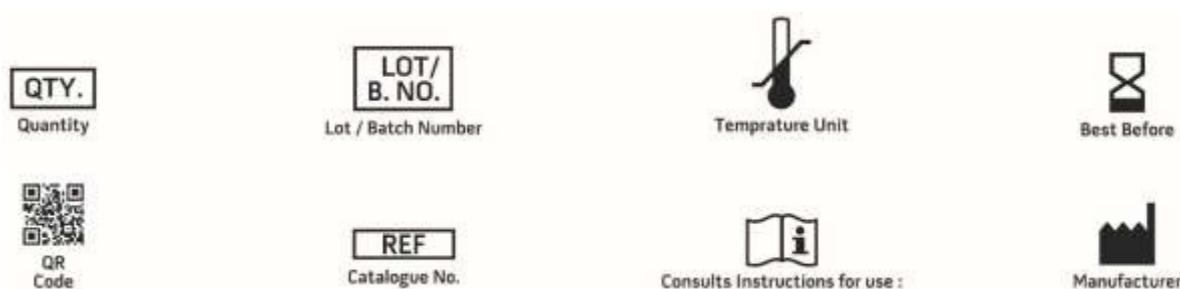
Product Deterioration: Do not use product if any contamination, discoloration or other sign of deterioration is found.

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.
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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.



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

*ForLab Use Only

