Technical Data Sheet

Meat extract, dry, powder, for microbiology

Ordering number: 1.32411.9025

For the usage as a nutritive substrate in microbiological culture media for analytical purpose and for industrial fermentation.

CAS number: 100085-61-8.

Meat extract is prepared from selected animal tissues which is free from fat and sinew. It is digested by a weak proteolysis with pancreatin (porcine origin) before being extracted.

Mode of Action

Meat extract is usually employed in concentrations of 0.3 to 1.0 % in culture media although concentrations may vary depending on the nutritional requirements for the medium formulation.

Meat extract is particularly suitable for cultivating of fastidious microorganisms like lactic acid bacteria and anaerobes. Several culture media containing meat extract are recommended in standard methods for multiple application.

It contains mixtures of peptides and amino acids, nucleotide fractions, organic acids, minerals and some vitamins.

Meat extract is often used for biochemical studies, particularly fermentation reactions, because of its independence from fermentable substances.

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Specification

Appearance	Lightly brownish-yellow fine powder
pH-value (5 %; water)	6.0 – 7.5
Total nitrogen (N) (Kjeldahl)	11.5 – 12.5 %
Sulfated ash (800 °C)	≤ 18.0 %
Loss on Drying (105 °C)	≤ 6.0 %
Amino nitrogen (as N)	3.5 – 4.5 %
Nitrite (NO_2)	Passes test
Suitability for microbiology	Passes test
Identity (NIR)	Passes test

Preparation

Refer to the final concentration of meat extract in the formula of the culture medium being prepared. Add appropriate product as required.

Experimental Procedure and Evaluation

Depend on the purpose for which the medium is used.

Storage

Store at +15 °C to +25 °C, dry and tightly closed. Protect from UV light (including sun light). For *in vitro* use only.

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Literature

ISO International Standardisation Organisation. Microbiology of food, animal feed and water - Preparation, production, storage and performance testing of culture media + Amendment 1 + Amendment 2. EN ISO 11133:2014/Amd1:2018/Amd2:2020.

United States Pharmacopeial Convention. (2022): The United States Pharmacopeia/National Formulation. Beef extract. Rockville, Md., USA.

Bridson, E.Y. and Brecker, A. (1970): Chapter III Design and Formulation of Microbial Culture Media. In: Methods in Microbiology. Volume 3, Part A, pp. 229-295. Academic Press, Cambridge, Ma., USA.

Ordering Information

Product	Cat. No.	Pack size
Meat extract, dry, powder, for microbiology	1.32411.9025	25 kg
Meat extract, dry, granulated, for microbiology	1.03979.0500	500 g
Meat extract, dry, granulated, for microbiology	1.03979.2500	2,5 kg

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