

Peptone from Meat (i23136)

Peptone from Meat is enzymatically hydrolyzed animal tissues that provides a complex nitrogen source in microbiological culture media.

Industry: Fermentation / Ingredients for culture media

Principles & Uses

Peptone from Meat, prepared through controlled enzymatic digestion of fresh meat, serves as a versatile ingredient for various microbiological applications. It is employed in culture media to support the growth of microorganisms and finds use in diverse fields such as fermentation, vaccine, and antibiotic production. Its utility spans across broth and agar culture media formulations, accommodating the needs of both fastidious and non-fastidious microorganisms.

Peptone from Meat, is a nitrogen-rich protein source for microorganisms. Its high sulfur content makes it particularly suitable for detecting bacteria like *Clostridia* and *Salmonella* that produce hydrogen sulfide.

Moreover, the Peptone from Meat's utility extends to various bacteria, including *enterobacteria*, *staphylococci*, yeast and molds. Also, in blood agar it promotes the growth of *streptococci* and the characteristic hemolysis, showcasing its versatility in microbiological culture media.

Chemical Characteristics

Humidity	3.5%
Total Nitrogen (TN)	12.3%
Ammonia Nitrogen (AN)	4.7%
AN/TN relationship	38.2%

Quality Control

Dehydrated Appearance: Light yellow to yellow, homogenous, free flowing powder, having Characteristic odor but not putrescent.

Solubility: Freely soluble in distilled/purified water, insoluble in alcohol and ether.

Solution Appearance (1X): Light Yellow and clear.

Total aerobic microbial count (cfu/gm): By plate method when incubated at 30-35°C for not less than 3 days. Bacterial Count: <= 2000 CFU/gram.

pH of 2% solution at 25 °C: 6.7- 8.0

Test for pathogens

<i>E. coli</i>	Negative in 10 gr
<i>Salmonella spp.</i>	Negative in 10 gr
<i>Pseudomonas aeruginosa</i>	Negative in 10 gr
<i>Staphylococcus aureus</i>	Negative in 10 gr
<i>C. albicans</i>	Negative in 10 gr
<i>Clostridia</i>	Negative in 10 gr

Cultural Response

The cultural response was assessed by preparing tryptone broth with the inclusion of Peptone from Meat as an ingredient, followed by incubation at 35-37°C for 18-24 hours.

Organism (ATCC*)	Recovery
<i>Escherichia coli</i> (25922)	Good to excellent
<i>Bacillus subtilis</i> (6633)	Luxuriant
<i>Saccharomyces cerevisiae</i> (9080)	Luxuriant

Storage

Keep container tightly closed at 15-30 °C.