

Peptone from Gelatin (i23650)

Peptone from Gelatin provides a rich source of essential amino acids, making it an excellent choice for cultivating non-fastidious microorganisms in culture.

Industry: Fermentation / Ingredients for culture media

Principles & Uses

Peptone from Gelatin, derived from enzymic digestion of gelatin, has a distinctive composition. This product results from the breakdown of gelatin, which is extracted from collagen, a fibrous protein found in tissues like bone and cartilage. Peptone from Gelatin's amino acid profile is carefully balanced, including essential amino acids and low molecular weight peptides. Importantly, it contains minimal fermentable carbohydrates. These characteristics make it a versatile component in culture media, particularly suited for non-fastidious microorganisms.

In microbiological applications, Peptone from Gelatin serves as a foundational nutrient in media preparation. It caters to the needs of microorganisms with less demanding nutritional requirements. Furthermore, this product finds utility in antibiotic assay media, where it ensures low yet reliable and reproducible growth levels. Additionally, it is an invaluable ingredient in media designed for various fermentation studies.

Quality Control

Dehydrated Appearance: Light yellow to yellow-brown, 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): 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: 6.50- 8.50

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 Gelatin 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.