Technical Info

Well advised with Roth.

Peptones and Extracts – Definitions and Comments

The term **peptone** is used for all proteins digested by acid or enzymes. In addition, the source (e. g. 8986.1: Peptone ex Casein) and the digesting compound should be given (e.g. "tryptic"). Source of nitrogen and amino acids.

Tryptone is manufactured by digestion of casein with pancreas extract (pancreatic digest). Tryptone is rich in tryptophane, and an ideal source of nitrogen and amino acids used in a number of microbiological nutrient media (Art. No. 8952).

NZamine also is manufactured by pancreatic digestion of casein. Being similar to tryptone it is often used as source of nitrogen and amino acids in nutrient media for bacterial growth in molecular biology (Art. No. CP76).

Proteose peptone is formed by hydrolytic cleavage of proteins from animal tissue, more complete that which occurs for peptones in general, but not strong enough to form single amino acids.
Proteose peptone is rich for peptides with high molecular weight, being a high-grade component of microbiological nutrient media.

Casamino acids originate from hydolysis of casein by acid. This compound is used as source of nitrogen and amino acids when completely hydrolysed protein is required, e. g. in proliferation assays or during production of vaccines and toxins (Art. No. AE41 and A157).

In the early days of bacteriology, so-called "**infusions**" (tissue extraction) were used in microbiological media. During the development of the dry media, these extracts were dried and used in a powdery form to produce purified and standardised extracts. Today, extracts or special, highly purified peptones are commonly used in modern media. As simply manufactured and non-standardised natural products, "infusion" have a relatively low batch-to-batch constancy and vary both in composition and in nutrient content. However, they are still commonly used in several classic media.

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