

# Bacto™ Casitone

## BBL™ Trypticase™ Peptone

### Bacto™ Tryptone

### BiTek™ Tryptone

#### Enzymatic Digests of Casein Product Description

**Bacto™ Casitone** is a pancreatic digest of casein. The manufacturing process for an enzymatic digest of casein is not as destructive as an acid hydrolysis. Thus, the casein is not broken down as completely into its constituent components. In many cases this makes for a more nutritious hydrolysate, especially for those organisms that prefer peptides to amino acids.

**BBL™ Trypticase™ Peptone** is a pancreatic digest of casein and is the primary nitrogen source in Trypticase Soy Broth and Agar.

**Bacto™ Tryptone** is a pancreatic digest of casein. It was developed by Difco Laboratories while investigating a peptone particularly suitable for the elaboration of indole by bacteria. It is also notable for the absence of detectable levels of carbohydrates.

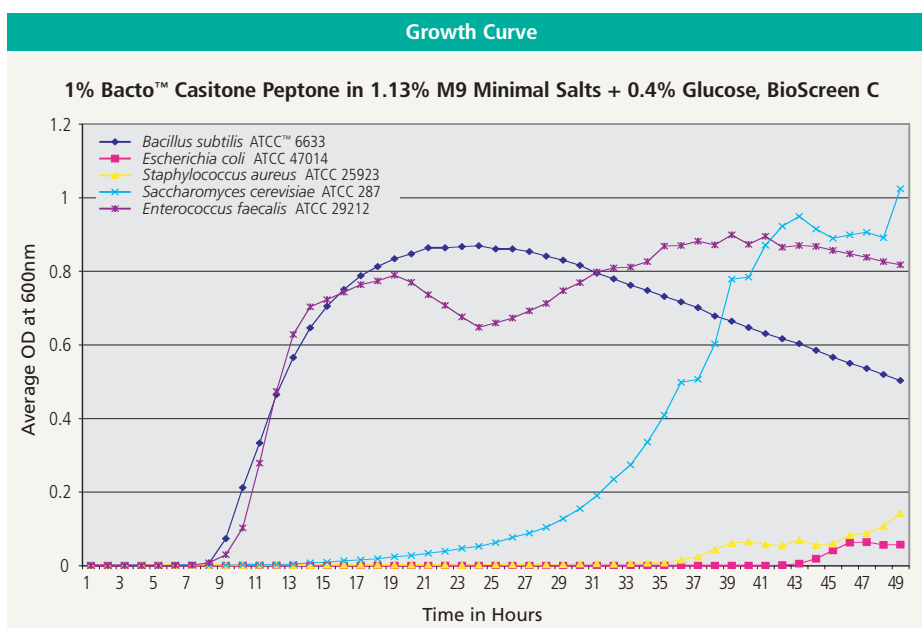
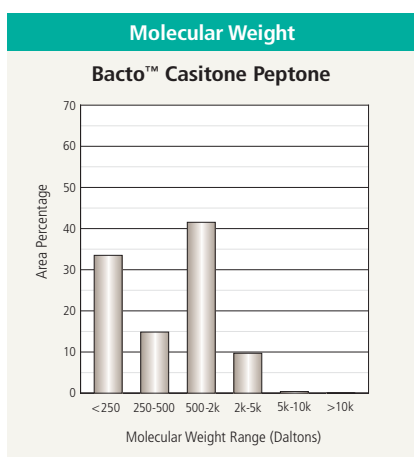
**BiTek™ Tryptone** is prepared similarly to Bacto Tryptone but the final product goes through fewer refinement steps during processing.

#### Potential Applications

**Bacto™ Casitone** can be used as a component in microbiological media or in fermentation applications. A recent publication has also reported that the stability of lyophilized influenza virus vaccine was augmented by the addition of 2% Casitone.<sup>1</sup>

**BBL™ Trypticase™ Peptone** is recommended for use in media formulations, where good growth of fungi and bacteria is required. It is referenced in *Official Methods of Analysis of AOAC International* and meets the USP specifications for pancreatic digest of casein.<sup>2,3</sup>

**Bacto™ Tryptone** has been used in conjunction with Casamino Acids in nutritional studies to determine amino acids vs. peptide utilization.<sup>4,5</sup> It is included in standard methods manuals



applications and is listed in the "Reagent" section of *The United States Pharmacopeia*, as meeting the specifications for pancreatic digest of casein, a component in many of the media listed.<sup>2,3,6-9</sup> *The European Pharmacopoeia* also lists pancreatic digest of casein as a component in many of the recommended media.<sup>10</sup> Bacto™ Tryptone also works well in fermentation applications. It has been used successfully with commonly used organisms such as *Escherichia coli*,<sup>11</sup> as well as uncommon organisms such as the diatom *Nitzschia laevis*.<sup>12</sup>

BiTek™ Tryptone provides some of the same benefits as Bacto Tryptone in instances where a less refined hydrolysate can be utilized.

## Physical Characteristics

Bacto™ Casitone appears as tan, free-flowing granules.

BBL™ Trypticase™ Peptone is a very light beige, fine, homogeneous, free-flowing powder.

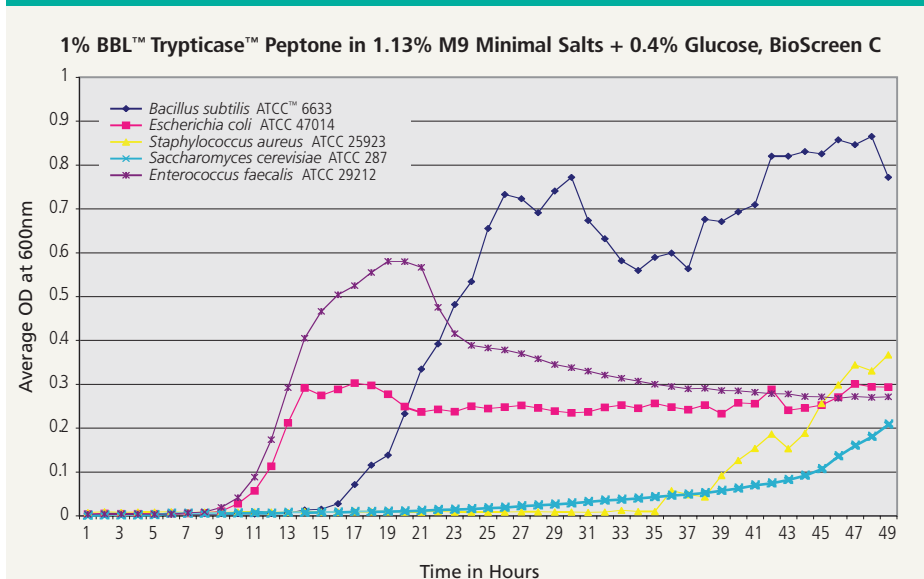
Bacto™ Tryptone is a light beige, homogeneous, free-flowing powder.

BiTek™ Tryptone is a light beige, homogeneous, free-flowing powder.

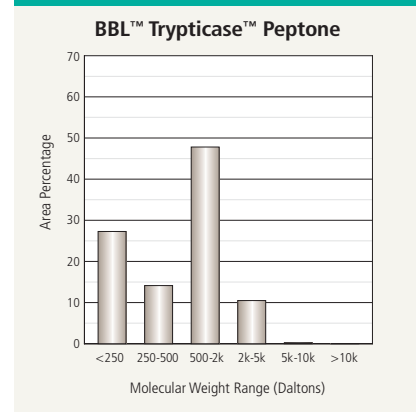
## Availability

Product Description	Cat. No.	Qty.
Bacto™ Casitone . . . . .	225930 . . . . .	500 g
Bacto™ Casitone . . . . .	225910 . . . . .	10 kg
BBL™ Trypticase™ Peptone . . . . .	211921 . . . . .	454 g
BBL™ Trypticase™ Peptone . . . . .	211922 . . . . .	5 lb (2.3 kg)
BBL™ Trypticase™ Peptone . . . . .	211923 . . . . .	25 lb (11.3 kg)
Bacto™ Tryptone . . . . .	211705 . . . . .	500 g
Bacto™ Tryptone . . . . .	211699 . . . . .	2 kg
Bacto™ Tryptone . . . . .	211701 . . . . .	10 kg
BiTek™ Tryptone . . . . .	251420 . . . . .	10 kg

### Growth Curve

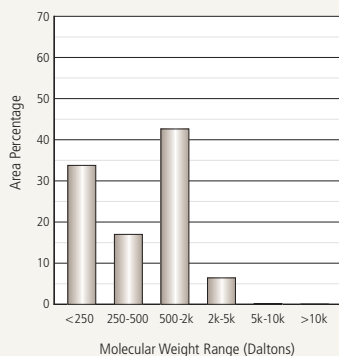


### Molecular Weight



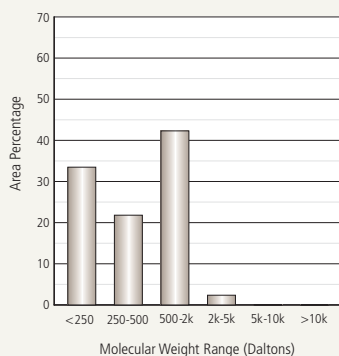
Molecular Weight

Bacto™ Tryptone Peptone



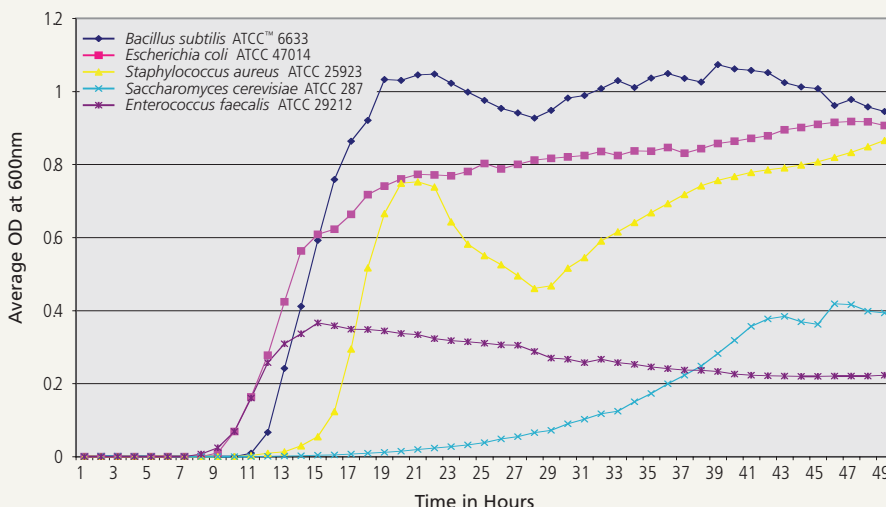
Molecular Weight

BiTek™ Tryptone Peptone



Growth Curve

1% Bacto™ Tryptone Peptone in 1.13% M9 Minimal Salts + 0.4% Glucose, BioScreen C



References

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