

Yeast Extract, Ultrafiltered

Cell Culture Tested

Product Code: TC438

Product Description:

Yeast extract is obtained by controlled autolysis (self-digestion) of selected strain of yeast *Saccharomyces*. This water-soluble fraction of the autolysis process is rich in B complex vitamins and serves as an excellent nitrogen source. It is also rich in amino acids, peptides, purine and pyrimidine bases and growth factors. Since yeast extract is obtained from non-animal sources, it can be used as nutritional supplement in animal-free mammalian and insect cell culture media formulations. Ultrafiltration improves solubility, filterability and reduces endotoxin.

Quality Control:

Physical Tests

Appearance

Light yellow to brownish yellow homogenous free flowing powder

Solubility

Freely soluble in water, insoluble in alcohol and ether

pH (2% w/v aqueous solution)

6.30 - 7.30

Chemical Tests

Total Nitrogen

NLT 10.5%

Amino Nitrogen

NLT 5.2%

Sodium chloride

NMT 1.0%

Loss on Drying

NMT 6.0%

Residue on Ignition

NMT 16.0%

Amino Acid Profile

Amino acid	Quantity (% w/w)
Alanine	5.44
Arginine	3.20
Aspartic acid	7.10
Cystine	0.81
Glutamic acid	20.01
Glycine	4.0
Histidine	1.50
Isoleucine	3.85
Leucine	5.01
Lysine	6.05
Methionine	1.22
Phenylalanine	2.65
Proline	3.00
Serine	3.11
Threonine	3.18
Tryptophan	2.03
Tyrosine	1.50
Valine	4.00

Microbial Tests

Total Aerobic Microbial Count (cfu/gm)

By plate method when incubated at 30-35°C for not less than 3 days

Bacterial count: NMT 2000 CFU/gram

Total Yeast and Mould Count (cfu/gm)

By plate method when incubated at 20-25°C for not less than 5 days

Yeast and mould count: NMT 100 CFU/gram

Test for Pathogens

Organism	Result (in 10g sample)
<i>Escherichia coli</i>	Negative
Salmonella species	Negative
<i>Pseudomonas aeruginosa</i>	Negative
<i>Staphylococcus aureus</i>	Negative
<i>Candida albicans</i>	Negative
Clostridia	Negative

Cell Culture Test

The growth promotion capacity of the ultrafiltered yeast extract is assessed qualitatively by supplementing media and analyzing the cells for the morphology and quantitatively by estimating the cell counts.

Packaging

Standard pack

500g in HDPE bottles

Bulk packs

5kg in double polythene bags in HDPE drums

25kg in double polythene bags in HDPE drums

Storage and Shelf Life:

Hygroscopic powder. Store at room temperature in air tight container in dry area.

Protect from light and moisture.

Use before expiry date given on product label.

Revision No.: 0 / 2014

Disclaimer:

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