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YEAST EXTRACT LP0021		

YEAST EXTRACT

LP0021

Description

A water soluble autolysate in powder form. For use in culture medium as a source of nitrogen and water soluble B vitamins.

Physical Characteristics

Appearance	Straw, free-flowing powder
Absorbance at 450nm (2% soln.)	0.240 - 0.450 units
Colour (0.5% soln.)	Pale straw
pH (25°C) (0.5% soln.)	7.0 ± 0.2
Clarity (0.5% soln.)	100%
Loss on drying	Less than or equal to 6.0%

Chemical Characteristics


Ash	9.8 - 16.0%
Chloride (as NaCl)	Less than or equal to 0.5%
Amino nitrogen	4.5 - 5.8%
Total nitrogen	10.0 - 12.5%
Calcium	0 - 500ppm

Microbiological Characteristics

The following tests are carried out:-

Test	Solution	Organism	Initial Inoculum	Incubation	Result
Fermentable carbohydrates	2% + 0.2ml of 1% phenol red solution and Durham tubes	<i>Escherichia coli</i> ATCC®25922	1E+04 to 1E+06 CFU	35 ± 2°C for 72 hours	Positive
Indole production	0.1%	<i>Escherichia coli</i> ATCC®25922	1E+04 to 1E+06 CFU	35 ± 2°C for 24 hours	¹ Positive

¹Indicator - Kovacs reagent

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Test	Solution	Organism	Control Inoculum	Incubation	Result
Growth recovery in broth	2%	<i>Escherichia coli</i> ATCC® 25922	10-100 CFU	37°C for 24 hours	Turbid growth
		<i>Staphylococcus aureus</i> ATCC® 9144	10-100 CFU	37°C for 24 hours	Turbid growth
		<i>Enterococcus faecalis</i> ATCC® 29212	10-100 CFU	37°C for 24 hours	Turbid growth

Total Viable Aerobic Count

A 2% yeast extract solution is further diluted and 1ml amounts are placed in sterile Petri dishes. Sterile Tryptone Soya Agar (CM0131) cooled to 44°C is added to the dilutions using the pour plate technique. Plates are incubated at 37°C for 18 hours. Colonies present are counted; they shall be less than 10,000 cfu/g.

Thermophilic Spore Count

A 2% yeast extract solution is further diluted and heated at 80°C for 10 minutes. 1ml amounts are placed in sterile Petri dishes. Sterile Tryptone Soya Agar (CM0131) cooled to 44°C is added to the dilutions using the pour plate technique. Plates are incubated at 37°C for 18 hours. Colonies present are counted; they shall be less than 2,000 spores/g.

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Revision History

Section / Step	Description of Change	Reason for Change	Reference
Chemical characteristics	Change of formol to amino nitrogen	Change control	MOC-2024-0368