

OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION
SPECIAL PEPTONE LP0072
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Description

A specially prepared mixture of peptones including meat, plant and yeast digests for use in bacteriological culture media.

Physical Characteristics

Appearance	Straw, free-flowing powder
Absorbance at 450nm (2% soln.)	0.135 - 0.327 units
pH (25°C) (2% soln.)	7.3 ± 0.2
Clarity (2% soln.)	Clear, bright and free from sediment and insoluble particles
Loss on drying	Less than or equal to 7.5%

Chemical Characteristics

Ash	Less than or equal to 16.1%
Chloride (as NaCl)	Less than or equal to 5.6%
Formol nitrogen	3.0 – 4.6%
Total nitrogen	11.0 - 13.0%

Microbiological Characteristics

The following tests are carried out:-

Test	Solution	Organism	Incubation	Result
Fermentable carbohydrate	2% + 0.2ml of 1% phenol red solution and Durham tubes	<i>Escherichia coli</i> ATCC®25922	35 ± 2°C for 72 hours	Negative to weak positive
Indole production	0.1%	<i>Escherichia coli</i> ATCC®25922	35 ± 2°C for 24 hours	¹ Positive
Hydrogen sulphide production	1%	<i>Salmonella enteritidis</i> ATCC®13076	35 ± 2°C for 42-48 hours	² Positive
Acetylmethylcarbinol	1% + 0.5% NaCl + 0.5% Dextrose	<i>Enterobacter aerogenes</i> ATCC®13048	37°C for 24 hours	³ Positive

- 1 Indicator - Kovacs reagent
- 2 Indicator - lead acetate paper
- 3 Indicator - Voges-Proskauer test solutions

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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% peptone 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% peptone 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.

Revision History

Section / Step	Description of Change	Reason for Change	Reference
Entire document	Update to new format	Update to new format	BT-SOP-7767
Physical and chemical characteristics	Change loss on drying, ash and chloride to less than or equal to. Add formol nitrogen limits.	Change control	BT-CC-1811
Microbiological characteristics	Add limits for Total Viable Aerobic and Spore Count. Change non-selective medium for total viable aerobic and spore counts from Plate Count Agar (CM0325) to Tryptone Soya Agar (CM0131)		