

Beerens Diluent

Cat. 2153

Diluent for neutralizing preservatives in routine examination of cosmetic products.

Practical information

Applications	Categories
Diluent	General use

Industry: Cosmetics

Principles and uses

Beerens Diluent is used to neutralize most of the chemical agents included in cosmetic products to maintain and preserve it free of microorganisms. It complies with the EU recommendation that states that before any microbiological examination, a treatment to remove all growth inhibitor systems in cosmetics must be performed.

Peptone provides nitrogen, vitamins, minerals and amino acids essential for growth of a great variety of microorganisms. Lecithin, polysorbate 80 and histidine act as neutralizers of preservatives like quaternary ammonium compounds, phenol and aldehydes derivatives. Sodium thiosulphate neutralizes halogen compounds.

Formula in g/L

Dipotassium phosphate	1	Lecithin	3
Peptone	1	Polysorbate 80	30
Sodium chloride	8,5	Sodium thiosulfate	5
L-Histidine	1		

Preparation

Suspend 49,5 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes.

Instructions for use

- Inoculate aseptically the tubes with the prepared sample or its dilution.
- Incubation times, temperature and sample volumes may vary depending on the sample, on the specifications.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber slightly opalescent	7,0 ± 0,2

Microbiological test

Incubation conditions: (35±2 °C / 24 h)

Inoculation conditions: (10-100 CFU)

Turbidity is categorized as: 0 no turbidity; 1 slight turbidity; 2 good turbidity.

Microrganisms	Specification
Shigella sonnei ATCC 25931	Turbidity (1-2)
Staphylococcus aureus ATCC 6538	Turbidity (1-2)
Bacillus subtilis ATCC 6633	Turbidity (1-2)

Escherichia coli ATCC 8739
Pseudomonas aeruginosa ATCC 9027

Turbidity (1-2)
Turbidity (1-2)

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

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ISO 11133:2014. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.