

Specification

Diluent for examination of cosmetic products with neutralizers.

Presentation

	Packaging Details	Shelf Life	Storage
20 Tubes Tube 16 x 113 mm with: 9 ± 0,1 ml	1 box with 20 tubes, 16x113 mm glass tubes, ink labelled and metal-Non injectable cap.	12 months	8-25°C

Composition

Composition (g/l):

Lecithine.....	3.00
Sodium thiosulfate.....	5.00
L-Histidine.....	1.00
Peptone.....	1.00
Sodium chloride.....	8.50
Dipotassium phosphate.....	1.00
Polysorbate 80	30.0 ml

Description /TechniqueDescription:

Cosmetic Beeren's Diluent has all the necessary compounds 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.

However, this standard also declares that later dilutions must be performed in less aggressive media, that may be considered as an enrichment and revitalization system, and suggests the use of Letheen Broth or Letheen Modified Broth.

The addition of the neutralizing agents TLHTh (Tween 80 - Lecithin - Histidine - Sodium Thiosulphate) may inactivate a variety of disinfectants:

- * The combination of lecithin, polysorbate 80 and histidine neutralizes aldehydes and phenolic compounds.
- * The combination of lecithin and polysorbate 80 neutralizes the quaternary ammonium compounds.
- * The polysorbate 80 neutralizes hexachlorophene and mercurial derivatives.
- * Sodium thiosulphate neutralizes halogen compounds.
- * Lecithin neutralizes chlorhexidine.
- * Histidine neutralizes formaldehyde.

Technique:

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results. Dispense liquid medium in appropriate containers if the original container is of large volume.

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.

This medium can be used to inoculate any confirmatory, secondary medium by streaking methodology or by spiral method; after proper incubation, enumerate all the colonies that have appeared onto the surface of the secondary agar.

Each laboratory must evaluate the results according to their specifications.

Calculate total microbial count per ml of sample by multiplying the average number of colonies per plate by the inverse dilution factor if streaked a diluted sample. Report results as colony forming Unit (CFU's) per ml or g along with enrichment and secondary media used, incubation time and temperature.

Quality control**Physical/Chemical control**

Color : Pale yellow

pH: 7 ± 0.2 at 25°C**Microbiological control**Prepare tubes / Inoculate 10^3 - 10^4 (Productividad)/ subculture after holding at 20-25°C for 45 min. to 1 h.Aerobic. Incubation at 32.5°C ± 2 , reading after 24-48h**Microorganism***Staphylococcus aureus* ATCC® 6538, WDCM 00032*Bacillus subtilis* ATCC® 6633, WDCM 00003*Escherichia coli* ATCC® 8739, WDCM 00012*Salmonella typhimurium* ATCC® 14028, WDCM 00031*Ps. aeruginosa* ATCC® 9027, WDCM 00026*Candida albicans* ATCC® 10231, WDCM 00054

Reference media

GrowthGood. Recovery $\pm 30\%$ T0 (original enumeration)Good. Recovery $\pm 30\%$ T0 (original enumeration)Good. Recovery $\pm 30\%$ T0 (original enumeration)Good. Recovery $\pm 30\%$ T0 (original enumeration)Good. Recovery $\pm 30\%$ T0 (original enumeration)Good. Recovery $\pm 30\%$ T0 (original enumeration)

TSA for bacteria / SDA for fungi

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH

Check at 7 days after incubation in same conditions

Bibliography

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- CEE (1976) Commission des Communautés Européennes. Groupe Spécial des Méthodes de Contrôle Microbiologique des Produits Cosmétiques: Limites Numériques Applicables au Contrôle Officiel de la Qualité Microbiologique des Produits Cosmétiques. XI/405A. ISPR. 1976.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.