Reference: 064-BA1022 **Scharlau Microbiology - Technical Data Sheet**

Product: # Beerens Cosmetic Diluent - 100 ml

Specification

Diluent for examination of cosmetic products with neutalizers.

Presentation

	Packaging Details	Shelf Life	Storage
10 Prepared bottles Bottle 125 ml with: 100 ± 3 ml	1 box with 10 bottles 125 ml Non injectable cap	16 months	8-25ºC

Composition

Composition (g/l):

Lecitine	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 /Technique

Description:

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 he 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 derivates.
* Sodium thiosulphate neutralizers halogen compounds.
* Lecithin neutralizes clorhexidine.
* 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 appropiate containers if the original container is of large volume.

Inoculate asseptically 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) pe 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 25ºC

Microbiological control

Prepare tubes / Inoculate 10^3- 10^4 (Productividad)/ subculture to T0, 45 minutes, 1h at 20-25ºC;
Aerobic.Incubation at 32.5ºC ±2, reading after 24-48h

Microorganism	Growth
Staphylococcus aureus ATCC® 6538	Good. Recovery ±30% T0 (original enumeration)
Bacillus subtilis ATCC® 6633	Good. Recovery ±30% T0 (original enumeration)
Escherichia coli ATCC® 8739	Good. Recovery ±30% T0 (original enumeration)
Salmonella typhimurium ATCC® 14028	Good. Recovery ±30% T0 (original enumeration)
Pseudomonas aeruginosa ATCC® 9027	Good. Recovery ±30% T0 (original enumeration)
Candida albicans ATCC® 10231	Good. Recovery ±30% T0 (original enumeration)

Sterility Control

Incubation 48 hours at 30-35ºC and 48 hours at 20-25ºC: NO GROWTH
Check at 7 days after incubation in same conditions

Bibliography

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