LICKSON®

CE

TECHNICAL SHEET

D/E NEUTRALIZING BROTH (DEY/ENGLEY NEUTRALIZING BROTH)

DESCRIPTION AND PRINCIPLE

Most cosmetics contain preservative which may interfere with detection and enumeration of microorganisms. D/E Neutralizing Broth (Dey/Engley Neutralizing Broth) inactivates preservative/anti-microbials and permits microorganisms in the sample to respond /show up appropriately during analysis.
Enzymatic digest of casein provides amino acids, nitrogen, carbon, minerals, vitamins and other nutrients which support the growth of microorganism. Yeast extract is a source of vitamins, particularly of B-group. Dextrose is the fermentable carbohydrate. Sodium thioglycollate neutralizes mercurial compounds. Sodium thiosulfate neutralizes iodine and chlorine. Sodium biosulfite neutralizes aldehydes. Lecithin neutralizes quaternary ammonium compounds. Bromcresol purple is the pH indicator. Tween 80 neutralizes phenoilics.

COMPOSITION	g/L
Pancreatic Digest of casein	5.0
Yeast extract	2.5
Glucose	10.0
Soybean lecithin	7.0
Sodium thiosulfate pentahydrate	6.0
Polysorbate 80 (Tween 80)	5.0
Sodium bisulfite	2.5
Sodium thioglycollate	1.0
Bromcresol purple	0.02

Final pH 7,6 ± 0,2 at 25°C

WARNING AND PRECAUTIONS

For in vitro diagnostic use.
Observe the precautions normally taken when handling laboratory reagents.
Prepared Medium: The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous.
Safety Data Sheet is available on request for professional users.
All wast must be disposed of according to local directives.

STORAGE AND STABILITY

Prepared medium:	10-25°C

The product is stable until the expiration date indicated on the label under the recommended storage conditions.

PROCEDURE

Transfer 1 g or 1 ml of the sample to a tube containing 9 ml of D/E Neutralizing Broth.
Inoculate the tube with a overnight microbial culture and incubate at 35±2°C for 24-48 hours.
To determine whether viable organisms are present in a "bacteriostatic" or "bactericidal" solution, inoculate sample from the broth onto other suitable media.
Incubate plates at 35±2°C for 48 hours.

RESULTS

Either the color change of the medium from purple to yellow or the formation of a pellicle on the surface of the broth indicate microbial growth.
Growth on the plates from negative broth tubes indicates a bacteriostatic substance. No growth on the plates from negative broth tubes indicates a bactericidal substance.
All positive broth tubes should be positive on the plates.

QUALITY CONTROL

Prepared medium: opaque and purple solution.

Typical response after incubation at 35±2°C for 48 hours:

MICROORGANISM	GROWTH
Bacillus subtilis ATCC 6633	Good growth
Escherichia coli ATCC 8739	Good growth
Pseudomonas aeruginosa ATCC 27853	Good growth
Staphylococcus aureus ATCC 6538	Good growth

REFERENCES

- Rapporti ISTISAN 13/15 (2013) – Istituto Superiore di Sanità – Guidelines and methods for the microbiological analysis of cosmetics.
-European Pharmacopoeia 8.0 (2014):2.6.1. Sterility; 2.6.12. Microbial examination of non-sterile products (total viable aerobic count).
- ISO 21148 Standard Cosmetics – Microbiology – General instructions for micro-biological examination.
-ISO 21149 Standard Cosmetics – Microbiology – Enumeration and detection of aerobic mesophilic bacteria.
- ISO 18415 Standard Cosmetics – Microbiology – Detection of specified and non-specified microorganisms.
- ISO 18416 Standard Cosmetics – Microbiology – Enumeration and detection of aerobic mesophilic bacteria.
- ISO 21150 Standard Cosmetics – Microbiology – Detection of Escherichia coli.
- ISO 22717 Standard Cosmetics – Microbiology – Detection of Pseudomonas aeruginosa.
- ISO 22718 Standard Cosmetics – Microbiology – Detection of Candida albicans.
- US Pharmacopoeia, 2007.

PRESENTATION	Packaging	REF.
Prepared medium:		
D/E Neutralizing Broth (Dey/Engley Neutralizing Broth)	**12 x 200 mL bottles**	**70086**

SYMBOLS

Read the instructions
Biological hazard
CE Mark (product complies with the requirements of Regulation (EU) 746/2017)
Temperature limitation
Use by
For in vitro diagnostic use
Manufacturer