TSP 003GT - DEY ENGLEY NEUTRALIZING AGAR PLATE (γ- IRRADIATED) (TRIPLE PACK)

INTENDED USE
For disinfectant testing, where neutralization agent is important for determining its bactericidal activity.

PRODUCT SUMMARY AND EXPLANATION
DEY ENGLEY NEUTRALIZING AGAR is used in disinfectant testing where neutralization of the antiseptics and disinfectants is important for determining its bactericidal activity. Use of a strong bacteriostatic substance having the ability to inhibit the growth and reproduction of potentially harmful bacteria, may lead to insufficient disinfection procedure, if the bacteria survive the procedure and causes serious infection under favourable conditions. Thus, to differentiate between bacteriostatic and bactericidal action of the disinfectant, Dey and Engley developed this media which determines the disinfectant's efficacy by neutralizing a broad spectrum of antiseptics and disinfectants including quaternary ammonium compounds, phenolics, iodine and chlorine preparations, mercurials, formaldehyde and glutaraldehyde.

The media are gamma irradiated in the packaging material to assure a reduction of the microbial load potentially present in the medium, on the dishes, and on the packaging materials.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Dextrose	10.000
Lecithin	7.000
Sodium thiosulphate	6.000
Casein enzymatic hydrolysate	5.000
Polysorbate 80	5.000
Yeast extract	2.500
Sodium bisulphite	2.500
Sodium thioglycolate	1.000
Bromocresol purple	0.020

PRINCIPLE
Casein enzymic hydrolysate and yeast extract provides essential nutrients. The media incorporates neutralizing substances for almost all the active products used as antiseptics and disinfectants. Sodium thioglycollate neutralizes mercurials; Sodium bisulfite neutralizes aldehydes; sodium thiosulfate neutralizes iodine and chlorine; lecithin neutralizes quaternary ammonium compounds; and polysorbate 80, a non-ionic surface-active agent, neutralizes substituted phenolics. Dextrose is the energy source and Bromocresol purple is used as a colorimetric indicator to demonstrate the production of acid from the fermentation of dextrose. Addition of dextrose and bromocresol purple aids in detection of microbial growth as the media color changes from purple to yellow due to a change in pH.

INSTRUCTION FOR USE
Either streak, inoculate or surface spread the test inoculum aseptically on the plate. Alternatively, these plates can also be used as settle plates for environmental monitoring.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Purple coloured medium
Quantity of Medium	:	15-18ml of medium in 55 mm plates.
pH (at 25°C)	:	7.6 ± 0.2
Dose of irradiation:	:	15-25 kGy
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Bacillus subtilis	6633	50-100	Luxuriant	>=70%	35±2°C	40-48 hours
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	35±2°C	40-48 hours
Staphylococcus aureus	6538P	50-100	Luxuriant	>=70%	35±2°C	40-48 hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	35±2°C	40-48 hours
Escherichia coli	8739	50-100	Luxuriant	>=70%	35±2°C	40-48 hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	35±2°C	40-48 hours
Pseudomonas aeruginosa	9027	50-100	Luxuriant	>=70%	35±2°C	40-48 hours
Salmonella typhimurium	14028	50-100	Luxuriant	>=70%	35±2°C	40-48 hours

PACKAGING:

Triple layered packing containing 5 No. of plates with one silica gel desiccant bag packed inside it.

STORAGE

On receipt, store the plates at 15–30 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.

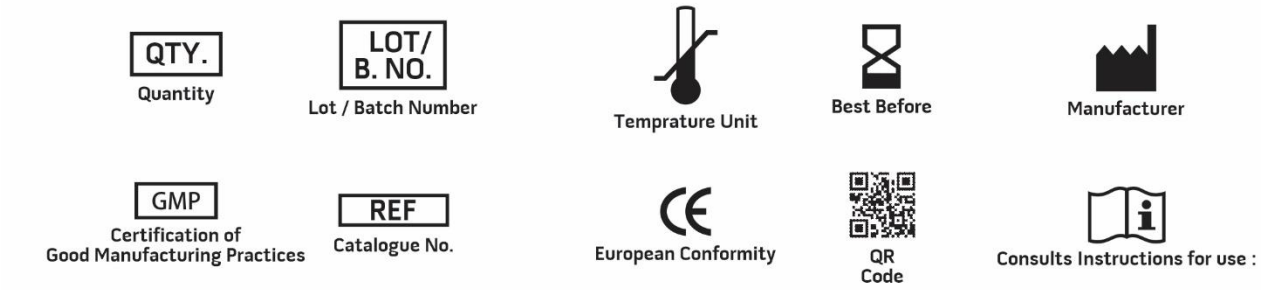
Product Deterioration: Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Engley, F. B., Jr. and B. P. Dey. A universal neutralizing medium for antimicrobial chemicals. Presented at the Chemical Specialties Manufacturing Association (CSMA) Proceedings. 56th MidYear Meeting. (1970).
2. Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed. American Public Health Association, Washington, D.C.
3. Quisno R.A., Gibby I.W., and Foter M.J., 1946, Am. J. Phar., 118:320
4. Erlandson A. L., and Lawrence C. A., 1953, Science 118:274.
5. Brummer B., 1976, Appl. Environ. Microbiol., 32:80.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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