

NUTRIENT AGAR WITH SODIUM CHLORIDE ISO 21528

CAT Nº: 1355

For the confirmation of Enterobacteria

FORMULA IN g/l

Peptone	5.00	Beef Extract	3.00
Sodium Chloride	5.00	Bacteriological Agar	15.00

Final pH 7.0 ± 0.2 at 25°C

PREPARATION

Suspend 28 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. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C, mix well and dispense into plates. The prepared medium should be stored at 8-15°C. The color is amber, slightly opalescent.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

USES

NUTRIENT AGAR WITH SODIUM CHLORIDE is a medium recommended by the ISO normative 21528 for the confirmation of Enterobacteriaceae.

Peptone and Beef extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bacteriological agar is the solidifying agent.

This medium is used after enrichment in BPW and subculture in VRBG Agar (Cat. 1093). Select well-isolated characteristic colonies from a 24 hours incubated at 37 °C plate of VRBG AGAR and inoculate in Nutrient Agar with Sodium chloride. If more than one morphology is present in the colonies, select one colony of each morphology to subculture. After 24 ± 2 hours at 37°C, select a well-isolated colony from each of the incubated plates for the biochemical confirmation tests.

If any of the selected typical colonies is oxidase-negative and glucose-positive, the tube from which the subculture was derived shall be regarded as being positive for Enterobacteriaceae.

MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37°C and observed after 24 ± 2 hours.

Microorganisms	Growth	Oxidase
<i>Escherichia coli</i> ATCC 25922	Good	-
<i>Salmonella typhimurium</i> ATCC 14028	Good	-
<i>Pseudomonas aeruginosa</i> ATCC 25783	Good	+

BIBLIOGRAPHY

ISO 21528: Microbiology of the food chain- Horizontal methods for the detection and enumeration of Enterobacteriaceae

The Food Hygiene (England) (no.2) Regulations 2005 Draft Statutory Instrument. England: HMSO; 2005.

SANCO 4198/2004 rev.19 (PLSPV/2001/4198/4198R19-EN.doc). Draft Comisión Regulation on Microbiological Criteria for Foodstuffs. 2005



STORAGE

Once opened keep powdered medium closed to avoid hydration.

