



Easy Dry™ Chromatic Salmonella

Chromogenic medium for detection of *Salmonella* spp from waters and associated materials.

DESCRIPTION

Liofilchem Easy Dry™ are absorbent pads impregnated with a sterile, dehydrated culture medium. Each pad is preplated in a Petri dish and is immediately ready to use after pouring sterile distilled or deionized water on it. Easy Dry™ are optimal for the examination of large sample volumes by the membrane filter method.

Easy Dry™ Chromatic Salmonella is a selective and differential chromogenic medium used for the isolation and differentiation of *Salmonella* species in water, including drinking waters and samples from all stages of treatment and distribution.

This medium can be used as second isolation agar in the four-step procedure described in EN ISO 6579-1 for detection of *Salmonella* in food, animal feed and environmental samples.

TYPICAL FORMULA	(g/l)
Protesose Peptone	7.0
Meat Extract	1.0
Yeast Extract	3.0
Sodium Chloride	5.0
Chromogenic and Selective Mix	3.7
Tween 20	3.0
Final pH 7.5 ± 0.2 at 25°C	

METHOD PRINCIPLE

Protesose peptone and meat extract provide amino acids, nitrogen, carbon, vitamins and minerals for organisms growth. Yeast extract is a source of vitamins, particularly of B-group. Sodium chloride maintains the osmotic balance of the medium. Chromogenic and selective mix allows to identify microorganisms on the basis of the color and morphology of the colonies while inhibiting most contaminant flora. Tween 20 enhances microbial growth.

PREPARATION

1. Cut open a bag and remove the number of Easy Dry plates needed.
2. Moisten the pad contained in the Petri dish with 2.2 ml of sterile distilled or deionized water.
3. Wait 5 minutes before using.

TEST PROCEDURE

Filter the sample through a filter membrane (0.45 µm pore diameter). Transfer the membrane onto a plate containing a just rehydrated pad. Incubate aerobically at 35 ± 2°C for 18-24 hours.

INTERPRETING RESULTS

After incubation observe the color of the colonies and interpret the results as indicated in the ID table.

ID Table.

Microorganism	Typical colony color
<i>Salmonella</i> spp (including <i>S. Typhi</i> , <i>S. Paratyphi</i> , lactose-positive, sucrose-positive)	Light mauve to mauve
<i>E. coli</i> , <i>Enterobacter</i> spp, <i>Klebsiella</i> spp	Blue-green
Other organisms (if not inhibited)	Colourless

Notes:

Certain strains of Gram-negative bacteria other than *Salmonella* may produce colonies resembling *Salmonella*. Complete identification must be performed with additional tests. For example, Oxidase test (ref. 88029) can be used to distinguish between *Salmonella* and rare strains of *Pseudomonas* which are able to grow on this medium with mauve colonies. On the other side, some *Salmonella* serovars may produce a weak coloration or may not develop. Therefore, it is recommended to use Easy Dry™ Chromatic Salmonella in conjunction with additional culture media suitable for the material under examination. *Salmonella* Latex Kit (ref. 96151) can be used as confirmatory test on suspected colonies directly from the plate.

APPEARANCE OF THE MEDIUM

Whitish pad. Yellowish once rehydrated.

STORAGE

Store at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

2 years.

QUALITY CONTROL

The plates are inoculated with the microbial strains indicated in the QC table.

Inoculum for productivity: 50-100 CFU.

Inoculum for selectivity: $\leq 10^4$ CFU.

Inoculum for specificity: 10^3 - 10^4 CFU.

Incubation conditions: aerobically at $35 \pm 2^\circ\text{C}$ for 18-24 hours.

QC Table.

Microorganism		Growth	Specification
<i>Salmonella</i> Typhimurium	ATCC® 14028	Good	Mauve colonies
<i>Salmonella</i> Enteritidis	ATCC® 13076	Good	Mauve colonies
<i>Shigella flexneri</i>	ATCC® 12022	Good	Colorless colonies
<i>Escherichia coli</i>	ATCC® 25922	Good	Blue-green colonies
<i>Enterobacter cloacae</i>	ATCC® 23355	Good	Blue-green colonies
<i>Proteus mirabilis</i>	ATCC® 25923	Partially to completely inhibited	---
<i>Pseudomonas aeruginosa</i>	ATCC® 27853	Partially to completely inhibited	---

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

BIBLIOGRAPHY

1. EN ISO 6579-1:2017. Microbiology of the food chain – Horizontal method for the detection, enumeration and serotyping of *Salmonella* – Part 1: Horizontal method for the detection of *Salmonella* spp.
2. D'Aoust, Mauer and Bailey. 2001. In Doyle, Beuchat, and Montville (ed.) Food microbiology: fundamentals and frontiers, 2nd ed. American Society for Microbiology, Washington, DC.
3. Bopp, Brenner, Wells and Strockbine. 1999. In Murray, Baron, Pfaller, Tenover and Tenover (ed.). Manual of clinical microbiology, 7th ed American Society for Microbiology, Washington, DC.

PRESENTATION	Category	Packaging	Ref.
Easy Dry™ Chromatic Salmonella	Easy Dry Media	100 pads	87515

TABLE OF SYMBOLS

LOT Batch code	 Keep away from sunlight	 Manufacturer	 Use by	 Fragile, handle with care
REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult Instruction For Use	 Do not reuse



LIOFILCHEM® s.r.l.

Via Scozia zona ind.le, 64026 Roseto degli Abruzzi (Te) Italy
Tel. +39 0858930745 Fax +39 0858930330 www.liofilchem.com