# ENDOAGAR

## **INSTRUCTION FOR USE**

#### For professional use

Intended use: Endo Agar is used for confirmatory and final tests of coliforms in water, dairy products and foodstuffs.

Ref.	Type of medium:	Packaging:
201350	ready-to-use medium-plate	1x20 pcs (90 mm)

**1. Principle:** tryptone provide nitrogen and carbon. Lactose serves as a carbohydrate source. Sodium sulphite and basic fuchsin make this medium selective by suppressing Gram-positive organisms. Dipotassium hydrogen phosphate is a buffering agent. Basic fuchsin is a pH Indicator. Agar is the solidifying agent.

### 2. Formula/Liter:

Tryptone	10.0 g
Lactose	10.0 g
Agar	15.0 g
Sodium sulphite	2.5 g
Dipotassium hydrogen phosphate	3.5 g
Basic fuchsin	0.4 g

### **3. pH:** 7.5 $\pm$ 0.2 at 25°C.

### 4. Appearance:

Prepared Appearance: prepared medium is clear red to purple.

5. Sample: all samples in which coliforms are expected.

6. Test procedure: if the agar plate has been refrigerated, allow to warm to room temperature before inoculation. Streak the specimen for isolation onto the surface of the medium. If the specimen is cultured from a swab, roll the swab gently over a small area of the surface at the edge, then streak from this area with a loop. Incubate plates aerobically at  $35\pm2^{\circ}$ C for 18-24 hours in an inverted position.

7. **Results:** after incubation time observe growth of characteristic microorganisms. *E.coli* and coliform bacteria metabolize lactose grow on Endo Agar with pink to red colonies, with (*E.coli*) or without (Coliforms) a metallic sheen. Non lactose-fermenting bacteria grow with colonies of the same colour as the medium, and have a tendency to fade to a faint pink colour.

**8. Quality control:** perform quality control testing for both negative and positive reaction by inoculating a representative sample of plates with pure cultures of stable control organisms that produce known, desired reactions. Graso uses following strains for performing quality control. Please note that other strains can be used in accordance with applicable local, state and laboratory's standard Quality Control.

Microorganism:	Growth:	Appearance of colony:
Escherichia coli ATCC 25922	good growth (2)	pink to red, metallic with sheen
Proteus mirabilis ATCC 12453	good growth (2)	colourless to light pink
Salmonella typhimurium ATCC 14028	good growth (2)	colourless without metallic sheen
Enterococcus faecalis ATCC 29212	no growth	

**9. Precautions:** if the inoculum is too heavy, the sheen may be suppressed. Occasionally, noncoliform organisms may produce typical sheen colonies. Coliform organisms may also occasionally produce atypical colonies, including dark red or nucleated colonies without sheen.

**10. Disposal of waste:** after use, all plates and any other contaminated materials must be sterilized or disposed of in line with appropriate internal procedures and in accordance with local legislations. Plates can be destroyed by autoclaving at 121°C for at least 20 minutes.

**11. Storage:** on receipt, store plates at 2-12°C away from direct sun light in an inverted position. Do not overload a refrigerator with excessive amounts of plates to avoid water condensation on the lids during storage. Plates must not come into direct contact with the inner walls of refrigerator, as the media may freeze, invalidating the tests. Prepared plates, stored in their original sleeve wrapping at 2-12°C until just prior to use, may be inoculated up to the expiration date and incubated for recommended incubation times. Plates from opened stacks of 10 plates should be used for two weeks when stored in a clean area at 2 to 12° C. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or others signs of deterioration. Allow the medium to warm to the room temperature before inoculation.

All microbiological media containing dyes or light-sensitive components should be protected from light and stored in the dark.

Note that shelf life of the growth media changes after the addition of supplements. Complete media containing protein supplement tend to degrade faster than basal media alone.

12. Shelf life: 3 months.

13. Required supplements not supplied together with medium base: not applicable.

14. References: available on request.



Graso Zenon Sobiecki Krag 4A; 83-200 Starogard Gdański www.grasobiotech.pl tel. + 48 (58) 562 30 21



Production Department Leśna 1, Owidz 83-211 Jabłowo



REV: 2018/03/05