

Microbiology

Merckotube® Selenite cystine enrichment broth 1.18438.0010

- 125 ml Glass bottles
- 100 ml filling volume
- Screw cap
- 10 bottles per pack

Selenite cystine broth

For the enrichment of salmonellae foodstuffs and other materials.

This culture medium complies with the recommendations of the American Public Health Association (1992), the United States Pharmacopeia XXIX.

Mode of Action

Selenite inhibits the growth of coliform bacteria and enterococci in the first 6-12 hours of incubation, its inhibitory effect then gradually declines. Salmonella, Proteus and Pseudomonas are, however, only slightly inhibited.

Typical composition (g/l)

Peptone from casein 5.0; L(-)cystine 0.01; lactose 4.0; phosphate buffer 10.0; sodium hydrogen selenite 4.0.

pH: 7.0 ± 0.2 at 25 °C.

The appearance of the medium is clear and yellowish.

Experimental Procedure and Evaluation

Add solid material to the normal-strength broth. Mix liquid samples with double-strength broth in the ratio 1:1.

Incubation: up to 24 hours at 35-37 °C - according to BÄNFFER (1971) and other authors, 43 °C is better.

After 6-12 hours and if necessary after 18-24 hours inoculate material from the resulting culture onto selective culture medium.

Shelf life in month

7 month

Storage

+2°C to +8°C

Ordering information

Product	Merck Cat.No.	Pack size
Merckotube® Selenite cystine enrichment broth	1.18438.0010	10 bottles (10 x 100 ml)

Quality control

Inoculum	Spec. Values
Salmonella typhimurium ATCC 14028	≤100
Escherichia coli ATCC 25922	≥10000
Enrichment from a mixed inoculum after 24h	
Salmonella typhimurium ATCC 14028	≥90 %
Escherichia coli ATCC 25922	≤10 %
Growth	
Salmonella typhimurium ATCC 14028	+
Escherichia coli ATCC 25922	none
Inoculum (Salmonella abony NCTC 6017)	Inoculum
	≤100
Test according to Ph.Eur	
Salmonella typhimurium ATCC 14028	+
Salmonella abony NCTC 6017	+
Sterility test	
	Growth
2 weeks at 20 to 25°C	no growth
2 weeks at 30 to 35°C	no growth

Enrichment of Salmonella typhimurium from a mixed inoculum; detection with BROLACIN agar.

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