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Selenite Cystine Broth

For the enrichment of *salmonellae* from faeces, foodstuffs and other materials

IVD

In Vitro Diagnostic Medical Device –

For professional use only

CE

Version 17-10-2008
Merck KGaA, 64271 Darmstadt

See also General Instruction for Use „How to use Dehydrated Culture Media"

For MSDS, warnings and precautions see our website: www.merck-chemicals.com

General Information

This culture medium complies with the recommendations of ISO Standard 6579 (1993), the American Public Health Association (1992), the United States Pharmacopeia XXIII (1995), the DIN Norm 10181 for the examination of milk and acc. to § 35 LMBG (German regulations) for food examination.

Principle

Microbiological method.

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/litre)

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

Preparation and Storage

Usable up to the expiry date when stored dry and tightly closed below +15 °C. Protect from light. After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed below +15 °C.

Suspend 23 g/litre at room temperature, if the medium does not dissolve readily, heat briefly (max. 60 °C); if the medium is to be stored, filter-sterilize; dispense into suitable containers.

■ **Do not autoclave.**

pH: 7.0 ± 0.2 at 25 °C.

The prepared broth is clear and yellowish.

After a longer storage period of the dehydrated medium, the colour of the prepared broth might change to redish/red. The microbiological performance however is not affected.

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 media.

Specimen

e.g. Stool.

Clinical specimen collection, handling and processing, see general instructions of use.

Literature

American Public Health Association: Compendium of methods for the microbiological examination of foods. - 3rd ec., 1992.

BÄNFFER, J.R.: Comparison of the isolation of Salmonellae from human faeces by enrichment at 37 °C and at 43 °C. - **Zbl. Bakt. I. Orig., 217**; 35-40 (1971).

Bundesgesundheitsamt: Amtliche Sammlung von Untersuchungsverfahren nach § 35 LMBG. - Beuth Verlag Berlin, Köln.

DIN Deutsches Institut für Normung e.V.: Mikrobiologische Milchuntersuchung. Nachweis von Salmonellen. Referenzverfahren. - **DIN 10181**.

United States Pharmacopeia XXVI, Chapter "Microbial Limit Tests" (1995).

Ordering Information

Product	Ordering No.	Pack size
Selenite Cystine Broth	1.07709.0500	500 g

Quality control

Test strains	Inoculum	Growth after 24 hours
Escherichia coli ATCC 25922	approx. 99 %	≤ 10 %
Salmonella typhimurium ATCC 14028	approx. 1 %	≥ 90 %