

Technical Data Sheet

CE Selenite Cystine Broth

Ordering number: 1.07709.0500

For the enrichment of *salmonellae* from faeces and other materials.

Selenite Cystine Broth is useful for detecting *Salmonella* in the nonacute stages of illness when organisms occur in the faeces in low numbers and for epidemiological studies to enhance the detection of low numbers of organisms from asymptomatic or convalescent patients.

This culture medium complies with the recommendations of ISO Standard 6579 (1993), the American Public Health Association (1992) and the United States Pharmacopeia XXIII (1995).

IVD in vitro diagnosticum - For professional use only

Mode of Action

Selenite inhibits the growth of enteric *coliform* bacteria and *enterococci*, mainly during the first 6-12 hours of incubation. *Salmonella*, *Proteus* and *Pseudomonas* are not suppressed.

Typical Composition

Peptone from Casein	5 g/l
L(-)-Cystine	0.01 g/l
Lactose	4 g/l
Phosphate Buffer	10 g/l
NaHSeO	4 g/l

Preparation

Suspend 23 g/l at room temperature. If the medium does not dissolve readily, heat briefly (max. 60 °C). If the medium is to be stored for a longer period of time filter-sterilize, dispense into suitable containers.

Do not autoclave.

The appearance of the prepared broth is clear and yellowish.

The pH value at 25 °C is in the range of 6.8-7.2.

Experimental Procedure and Evaluation

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

Incubation: up to 24 h at 37 °C – according to Bänfer (1971) and other authors 43 °C is better.

After 6-12 h and, if necessary, after 18-24 h inoculate material from the resulting culture onto selective culture media.

Storage

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

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.

Storage of the dehydrated culture medium below 15 °C!

Specimen

e.g. Stool.

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

Quality Control

Control Strains	ATCC #	Inoculum	Incubation	Expected Results
<i>Escherichia coli</i>	25922	≥ 10 ⁴	24 h at 35 °C	Growth inhibited
<i>Salmonella typhimurium</i>	14028	10-100	24 h at 35 °C	Growth, enrichment from a mixed inoculum

Please refer to the actual batch related Certificate of Analysis.

Literature

American Public Health Association (1992): Compendium of methods for the microbiological examination of foods. 3rd edition.

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

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.

Georgala, D. L. and Boothroyd, M. (1965): A system for detecting *salmonellae* in meat and meat products. Journal of Applied Bacteriology. **28**: 206-212.

United States Pharmacopeia XXIII (1995): Chapter "Microbial Limit Tests".



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Ordering Information

Product	Cat. No.	Pack size
Selenite Enrichment Broth acc. to Leifson	1.07717.0500	500 g

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