SMWW

Selenite Enrichment Broth acc. to LEIFSON

Selenite-F Broth; Selenite Broth

Medium proposed by LEIFSON (1936) for the selective enrichment of Salmonella from faeces, urine, water, foodstuffs etc.

IVD

In Vitro Diagnostic Medical Device –

For professional use only

CE

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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

Principle

Microbiological method.

General Information

The medium complies with the recommendations of the APHA (1992) for food examination.

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 (g/litre)

Peptone from meat 5.0; lactose 4.0; sodium selenite 4.0; dipotassium hydrogen phosphate 3,5; potassium dihydrogen phosphate 6.5.

Preparation

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 for a longer period of time filter-sterilize, dispense into suitable containers.

■ **Do not autoclave.**

pH: 7.0 ± 0.2 at 25 °C.

The prepared broth is clear and yellowish.

Storage

After a longer storage period of the dehydrated medium, the colour 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, urine .

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

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 hours at 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.

Literature

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

LEIFSON, E.: New selenite enrichment media for the isolation of typhoid and parathyphoid (Salmonella) bacilli. - **Am. J. Hyg., 24**; 423-432 (1936).

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

Ordering Information

Product	Ordering No.	Pack size
Selenite Enrichment Broth acc. to LEIFSON	1.07717.0500	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 %