SELENITE CYSTINE BROTH
Broth for selective enrichment of Salmonella spp (ISO 6785)

TYPICAL FORMULA (g/l)

<table>
<thead>
<tr>
<th>Component</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tryptone</td>
<td>5.00</td>
</tr>
<tr>
<td>Lactose</td>
<td>4.00</td>
</tr>
<tr>
<td>Sodium Selenite</td>
<td>4.00</td>
</tr>
<tr>
<td>Sodium Phosphate</td>
<td>10.00</td>
</tr>
<tr>
<td>L-Cystine</td>
<td>0.01</td>
</tr>
<tr>
<td>Final pH 7.0 ± 0.2</td>
<td></td>
</tr>
</tbody>
</table>

DESCRIPTION
SELENITE CYSTINE BROTH is a selective enrichment medium recommended by ISO 6785: 200, IDF 93: 2001, AOAC Methods and USP for use in detecting and identifying Salmonella spp in foods, dairy products and other materials of sanitary importance.

PRINCIPLE
Tryptone is a product obtained by a controlled enzymatic hydrolysis of casein and contains a mix of peptides and free amino acids. Sodium selenite possesses a high level of toxicity at a neutral pH for E. coli, but not for the main part of microorganisms belonging to the group of salmonellae. A buffer system reduces to a minimum the alkalinising effects induced by the reduction of sodium selenite. These alkalinising effects would reduce the selective properties of the medium. The acids produced by the fermentation of lactose by microorganisms, such as coliforms, contribute by neutralising the alkaline reaction of the medium. L-Cystine is incorporated to improve the recovery of Salmonella spp.

PREPARATION
Check the content of the tube is homogeneous and clear, repeatedly turning the bottle upside down if it is the case. Selenite Cystine Broth can be used as it is or aseptically subdivided into smaller aliquots.

TECHNIQUE
Suspend 1 or 2 g of the specimen in the broth (approximately 10-15% by volume) and emulsify with an inoculating needle, if it is necessary. Incubate tubes with loosened caps at 36+/−1°C for 12-24 hours. E.coli and Proteus spp growth is inhibited only for the first 8-12 hours of incubation: during this time there will be a growth of salmonellae, so it is advisable to inoculate a solid medium such as Mac Conkey Agar (ref. 10029) after 12 hours of incubation of the clinical specimen in Selenite Cystine Broth.

INTERPRETATION OF RESULTS
After incubation on Mac Conkey Agar plates (ref. 10029) at 36+/−1°C for 18-24 hours E. coli colonies will appear pink with bile precipitates whilst Salmonella typhimurium colonies will appear colorless.

STORAGE AND TRANSPORT CONDITIONS
2-8°C away from light, until the expiry date on the label. However, our stability studies have shown that the transport at 18-25°C for 4 days, or at 35-39°C for 48 hours, does not alter in any way the performance of the product. Eliminate if signs of deterioration or contamination are evident.

WARNING AND PRECAUTIONS
The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product must be used by properly trained operators only.

DISPOSAL OF WASTE
Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES
PRODUCT SPECIFICATIONS

NAME
SELENITE CYSTINE BROTH

PRESENTATION
Glass tubes containing 10 ml of medium

STORAGE
2-8°C

PACKAGING

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Content</th>
<th>Packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>24510</td>
<td>20 tubes x 10 ml</td>
<td>20 tubes in cardboard box</td>
</tr>
</tbody>
</table>

pH OF THE MEDIUM
7.0 ± 0.2

USE
SELENITE CYSTINE BROTH is a selective enrichment broth recommended by ISO 6785: 2001, IDF 93: 2001, AOAC Methods and USP for use in detecting and identifying Salmonella spp in foods, dairy products and other materials of sanitary importance

TECHNIQUE
Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM
Very light amber medium, slightly opalescent

SHELF LIFE
1 year

QUALITY CONTROL
1. Control of general characteristics, label and print
2. Sterility control
   7 days at 22 ± 1°C, in aerobiosis
   7 days at 36 ± 1°C, in aerobiosis
3. Microbiological control
   Inoculum for productivity: 10-100 CFU/ml
   Inoculum for selectivity: 10^4-10^5 CFU/ml
   Inoculum for specificity: ≤ 10^4 CFU/ml
   Incubation Conditions: 12-24 h at 36 ± 1°C, in aerobiosis
   After 12 hours of incubation subculture in Mac Conkey Agar for 18-24 hours at 36+/-1°C, in aerobiosis

Microorganisms | Growth | Features on Mac Conkey Agar
--- | --- | ---
Escherichia coli ATCC 25922 | Poor | Pink colonies with bile precipitates
Salmonella typhimurium ATCC 14028 | Good | Colourless colonies

TABLE OF SYMBOLS

<table>
<thead>
<tr>
<th>LOT</th>
<th>Batch code</th>
<th>Do not reuse</th>
<th>Manufacturer</th>
<th>Use by</th>
<th>Fragile, handle with care</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF</td>
<td>Catalogue number</td>
<td>Temperature limitation</td>
<td>Contains sufficient for &lt;n&gt; tests</td>
<td>Caution, consult instructions for use</td>
<td></td>
</tr>
</tbody>
</table>