

Selenite (F) Broth

Medium used for isolation and cultivation of *Salmonella* spp.

*Equally use with MFDS (MB-S1145K) and NIER (MB-S1145N).

• CONTENTS (Liter)

Peptone	5.0 g
Lactose	4.0 g
Disodium Phosphate	10.0 g
Sodium Selenite	4.0 g
Final pH = 7.0 ± 0.2 at 25°C	

• PROCEDURE

Suspend 23.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Over heating will destroy the selectivity. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

• INTERPRETATION

Selenite (F) Broth is a medium used for the isolation and cultivation of *Salmonella* spp. Peptone provides nitrogen, carbon, amino acids and minerals. Lactose is the fermentable carbohydrate. Disodium phosphate is the buffering agent. Sodium selenite is the selective agent.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 35 ± 2°C for 18 - 24 hours. Slightly loosen the caps. Subculture onto MacConkey Agar and incubate at 35 ± 2°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: off-white

Prepared medium

Appearance: clear

Color: very light amber to reddish amber

Incubation conditions: 35 ± 2°C / 18 - 24 hours / loosen the caps

then subculture onto MacConkey Agar / 35 ± 2°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Salmonella typhimurium</i>	14028	50-100	good	colorless colonies
<i>Escherichia coli</i>	25922	50-100	partially inhibited	pink colonies with bile precipitates

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

* If stored for a long time dehydrated medium, the color of dehydrated medium and prepared medium may be darken. But performance of medium is not affected. The color change can be delayed during storage by sealing using a zipper bag, etc.

• REFERENCES

1. Am. J. Hyg., 24: 423, 1936.
2. Public Health Reports, 63: 1075, 1916.
3. Refer to the MFDS and NIER.

• PACKAGE

Cat. No : MB-S1145 Selenite (F) Broth	500 G
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• MICROBIAL CULTURE IMAGES



None *S. typhimurium* *E. coli*
ATCC 14028 ATCC 25922

Incubation conditions : 35 ± 2°C / 18 - 24 hours