OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

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Oxford
Range of
Laboratory Chemicals

TECHNICAL DATA SHEET

SS Agar (Salmonella Shigella Agar)

Principle

Salmonella Shigella agar composed of proteose peptone, meat extract, lactose, bile salts, sodium citrate, sodium thio-sulphate, ferric citrate, neutral red, brilliant green and agar. Proteose peptone and meat extract provide essential growth nutrients. Lactose is the fermentable carbohydrate. Brilliant green, bile salts and thiosulphate provide selectively and inhibit gram-positive and coliform organisms. Certain organisms reduce sodium thiosulphate to sulphite and H_2S gas. Sodium thiosulfate and ferric citrate allow the detection of hydrogen sulfide by the production of colonies with black centers. Neutral red and brilliant green are present as pH indicators.

Use: Recommended for the selective isolation and determination of *Salmonella* and some *Shigella* sp. from clinical and non-clinical samples.

Contents*

Ingredients	Gram/Litre
Proteose peptone	5.000
Meat extract#	5.000
Lactose	10.000
Bile salts mixture	8.500
Sodium citrate	8.500
Sodium thio-sulphate	8.500
Ferric citrate	1.000
Neutral red	0.025
Brilliant green	0.033
Agar	13.500
pH at 25˚C	7.0 ±0.2

*** Formula adjusted for optimum performance and parameters**

Directions: Dissolve 60.00 grams in 1000 ml distilled water. Boil to dissolve the medium completely for sterilization. DO NOT AUTOCLAVE, cool it to 42-45 °C and distribute aseptically in to the plates. Ensure complete solidification and inoculate aseptically.

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Specimens' types analyzed

Pharmaceutical samples, clinical and non-clinical samples, food and dairy products etc.

Precautions to be taken

These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation

The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	**Light buff to pink colored free flowing, homogeneous powder**
Reaction of 6.0% solution	**7.0 ±0.2 at 25 ˚C**
pH	**6.80- 7.20**
Gelling	**Firm comparable with 1.35% agar gel**
Color and clarity of ready medium	**Red-orange, slightly opalescent gel**
Growth Promotion properties	**Best at ≤ 100 CFU at 32-37 ºC for 18-72 h**
Indicative properties	**Optimum at ≤ 100 CFU at 32-37 ºC for 18-48 h**
Negative control	**Performed using sterile distilled water**

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Different Microbial Response
Cultural characteristics observed after an incubation at 35 ± 2°C for 18-48 hours

Organism	Inoculum	Growth	Color	Recovery	Incubation Temperature
Salmonella typhimurium **(ATCC 14028)**	**50-100**	**Good**	**Black centered colorless**	**70-80%**	**33-37ºC**
Shigella flexneri **(ATCC 12022)**	**50-100**	**Good**	**Colorless**	**70-80%**	**33-37ºC**
Escherichia coli **(ATCC 8739)**	**50-100**	**Fair**	**Pink to colorless with bile precipitate**	**30-40%**	**33-37ºC**

Storage and Shelf Life: Hygroscopic; keep container tightly closed. Store in cool dry place.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

1. **Atlas, R. M. (2005).** ***Handbook of media for environmental microbiology*****. CRC press.**
2. ***Difco Manual*** **(1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.**
3. **Rand, M. C., Arnold E. Greenberg, and Michael J. Taras, (1976),** ***Standard methods for the examination of water and wastewater*****. Prepared and published jointly by American Public Health Association, American Water Works Association, and Water Pollution Control Federation.**
4. **Wehr H. M. and Frank J. H., (2004),** ***Standard Methods for the Microbiological Examination of Dairy Products*****, 17th Ed., APHA Inc., Washington, D.C**

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