OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

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: For the differential and selective isolation of Salmonella & Shigella species from pathological 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.

OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Oxford
Range of
Laboratory Chemicals

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**

OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Oxford
Range of
Laboratory Chemicals

Different Microbial Response

Cultural characteristics observed after incubation at 33-37°C for 18-24 hours.

Organism	ATCC	Inoculum (CFU)	Growth	Recovery	Color
Salmonella typhimurium	14028	50-100	Luxuriant	≥ 60%	Colorless with black centered
Salmonella enteritidis	13076	50-100	Luxuriant	≥ 60%	Colorless with black centered
Shigella flexneri	9199	50-100	Luxuriant	≥ 60%	Colorless
Escherichia coli	8739	50-100	Fair	≥ 30%	Pink to colorless with bile precipitate
Enterococcus faecalis	14506	50-100	Poor	≥ 10%	Colorless

Storage and Shelf Life: The product is highly hygroscopic; keep the container tightly closed at all times and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label. Note: Sterilize media immediately after reconstitution.

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**

OXFORD LAB FINE CHEM LLP
ISO 9001-2008 Certified Company

Regd Office: Unit no 12, 1st Floor,
Neminath Industrial Estate No.6,
Navghar, Vasai (East), Palghar - 410210.
Maharashtra, INDIA.

Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com

Oxford
Range of
Laboratory Chemicals

Disclaimer:

****

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.
Oxford Lab Fine Chem LLP makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Oxford Lab Fine Chem LLP will not be responsible for damages resulting from use of or reliance upon this information.