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

Wilson Blair Agar Base

Principle

Wilson Blair agar base is developed by Wilson and Blair (1926); media is composed of special peptone, meat extract, dextrose, sodium chloride and agar. Meat extract and peptone provide nitrogen and minerals. Dextrose is an energy source. Sodium chloride maintains osmatic equilibrium and agar is a solidifying agent. The media is fortified with sodium sulphite, disodium phosphate, bismuth ammonium citrate and ferrous sulpahte. Ferrous sulfate is used for detection of hydrogen sulfide production. The hydrogen sulfide producer's forms precipitate with ferrous sulfate givers brown to black color with metallic sheen to the positive cultures.

Use: For isolation and cultivation of Salmonella typhi with addition of selective reagent.

Contents*

Ingredients	Gram/Litre
Meat Extract#	5.00
Peptone	10.00
Dextrose	10.00
Sodium chloride	5.00
Agar	30.00
pH at 25˚C	7.3 ±0.2

*** Formula adjusted for optimum performance and parameters**
#Equivalent to beef extract

Directions: Dissolve 60.00 grams in 1000 ml distilled water. Boil to dissolve the medium completely. Sterilize the medium by autoclaving at 15 lbs pressure at 121˚C for 15 minutes; cool it to 42-45 °C. Add 70 ml of bismuth ammonium sulphite reagent and 4 ml of 1% brilliant green solution. Mix well and distribute aseptically in petri plates with gentile shaking for equal distribution. Ensure complete solidification and inoculate test sample aseptically.

Specimens types analyzed

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

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

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 beige colored free flowing, homogeneous powder**
Reaction of 6.0% solution	**7.3 ±0.2 at 25 ˚C**
pH	**7.10- 7.50**
Gelling	**Firm comparable with 3% agar gel**
Color and clarity of ready medium	**Light amber colored opalescent gel. After addition of bismuth ammonium Sulphate reagent and 4 ml of 1% brilliant green solution, greenish yellow colored opaque gel forms.**
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**

Different Microbial Response: Inoculate and incubate at 35 ± 2°C for 24-48 hours. Inoculum 50-100 CFU

Organism	ATCC	Growth	Colony color
Salmonella typhimurium	**14028**	**Luxuriant**	**Grey to black with greenish metallic sheen**
Proteus mirabilis	**12453**	**Luxuriant**	**Green**
Escherichia coli	**8739**	**Inhibited**	**--**

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

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. **Wilson, W. J., and E. M. Blair. (1926).** ***A combination of bismuth and sodium sulphite affording an enrichment and selective medium for the typhoidparatyphoid groups of bacteria*****. J. Pathol. Bacteriol. 29:310.**
4. **Wilson, W. J., and E. M. Blair. (1927).** ***Use of a glucose bismuth sulphite iron medium for the isolation of B. typhosus and B. proteus.*** **J. Hyg. 26:374-391.**
5. **Wilson, W. J., and E. M. Blair. (1931).** ***Further experience of the bismuth sulphite media in the isolation of B. typhosus and B. proteus.*** **J. Hyg. 31:138-161.**

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.