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

DNase Test Agar Base w/o DNA

Principle

DNase Test Agar Base is composed of tryptone, soya peptone, sodium chloride and agar. The DNase test agar base is used to detect DNA hydrolyzing microorganism particularly for identification of pathogenic Staphylococci. With the help of toluidine blue, it is also used for the identification of non-pigmented Serratia species, that might be improperly identified as Enterobacter and Klebsiella species. The media is fortified with deoxyribose nucleic acid which is used by the organisms to make nucleic acids and to use as a source of nitrogen, phosphate and carbon. In addition, tryptone and soya peptone are source of nitrogen, while sodium chloride maintains osmotic equilibrium of the medium.

Use: For detection of deoxyribonuclease activity of microorganisms & identification of pathogenic Staphylococci.

Contents*

Ingredients	Gram/Litre
Tryptone	15.00
Soya Peptone	5.00
Sodium chloride	5.00
Agar	15.00
pH at 25˚C	7.3 ±0.2

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

Directions: Dissolve 42.00 grams in 1000 ml distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 121 ˚C at 15 lbs for 15 minutes. Cool to room 40 to 45 ˚C and distribute aseptically in petri plates with gentile shaking for equal distribution. Ensure complete solidification and inoculate test sample aseptically.
The media can be fortified with 0.1g toluidine blue before sterilization for proper visualization. DNase activity results in the production of a bright pink reaction due to the metachromatic property of Toluidine blue. Some strains of *Staphylococcus* may be inhibited on DNase Test Agar by the Toluidine blue. Further confirmatory tests for identification should be carried out.

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

Clinical and non-clinical samples, food and dairy samples 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 beige colored free flowing, homogeneous powder**
Reaction of 4.00% solution (0.20 g of deoxyribose nucleic acid)	**7.3 ±0.2 at 25 ˚C**
pH	**7.10- 7.50**
Gelling	**Firm comparable with 1.5% agar gel**
Color and clarity of ready medium	**Light yellow colored opalescent gel or light blue with toluidine blue colored to slight 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 with added Toluidine Blue after an incubation at 35 - 37°C for 18 – 24 hours.

Organism	ATCC	Inoculum	Growth	Colony color
Staphylococcus aureus	25923	50-100	Luxurious	Positive, change in color from blue to pink purple around the growth when toluidine blue is used/ clear zone surrounding colonies when plates are flooded w/1N HCL
Staphylococcus epidermidis	12228	50-100	Luxurious	Negative

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. **American Public Health Association, Standard Methods for the Examination of Dairy Products, (1978), 14th Ed., Washington D.C.**
2. **Jorgensen,J.H., Pfaller , M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015). *Manual of Clinical Microbiology*, 11th Edition. Vol. 1.**
3. **Salfinger Y., and Tortorello M.L. Fifth (Ed.), (2015), *Compendium of Methods for the Microbiological Examination of Foods*, 5th Ed., American Public Health Association, Washington, D.C.**
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.