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## Strep A Agar OxyPlate™ Product Insert

Each Strep A OxyPlate™ creates and maintains an anaerobic environment without the need for special equipment, such as chambers or jars. OxyPlates™ simplify working with anaerobes.

OxyPlates™ are made PRAS (Pre-Reduced Anaerobically Sterilized) with our unique OxyDish™ plate design, and utilize the Oxyrase® Enzyme System. The OxyDish™ is specially designed to create a seal that maintains anaerobiosis.

### Precautions:

Strep A OxyPlates™ plates are for In-Vitro Use only. OxyPlates™ are packaged aseptically and must be handled aseptically to maintain sterility during use. A **Safety Data Sheet** is available on our website.

### Product Characteristics:

Strep A agar was developed for the isolation of group A beta-hemolytic streptococci (1). Yeast nucleic acid, and maltose, promote increased colony size and enhanced hemolytic zones (2,3). Defibrinated sheep blood provides additional nutrients and stimulates an improved beta-hemolysis (4) with the addition of the Oxyrase® Enzyme System.

The Oxyrase® Enzyme System used in the OxyPlate™ provides a reduced medium **before** sterilization and maintains the medium in a reduce state for storage and during use. The Oxyrase® Enzyme System prevents the formation of undesirable oxidation products in these PRAS plates. The unique OxyDish™ design maintains anaerobiosis within the sealed plate (5). OxyPlates™ can be opened and closed several times, and will regenerate and maintain anaerobic conditions.

<u>Media Formulation</u> (per liter)	<u>Initial pH: 7.3 (+/- 0.2)</u>
Enzymatic Digest of Casein	10.0 g
Beef Extract	6.7 g
Maltose	0.25 g
Nucleic Acid	6.0 g
Dextrose	5.0 g
Sodium Chloride	5.0 g
Agar	15.0 g
Neomycin Sulfate	2.0 mg
Polymyxin B Sulfate	24.0 mg
Selective Agents	2.89 mg
Sheep Blood	35.0 mL
Deionized water	(made up to final volume)
Oxyrase® Enzyme System	- proprietary -

This formula is typical. Production lots may be adjusted, to offset variances in raw materials in order to meet performance criteria.

### Limitations:

Strep A OxyPlates™ are designed to grow *Group A streptococcal*

organisms. Additional testing may be needed to further identify microorganisms grown on the OxyPlate™.

The Oxyrase® Enzyme System contains a penicillin binding protein that may interfere with penicillin and some related antibiotics.

### Handling and Storage Instructions:

Strep A OxyPlates™ plates will arrive at room temperature. The following storage options are listed below:

1. **Long Term Storage:** Store the product at 2°C to 8°C (cold temperature - CT). The expiration date of plates stored at this temperature is 14 weeks from the date of manufacture.
2. **Short Term Storage:** Store the product at 20°C to 25°C (room temperature - RT). The expiration date of plates stored at this temperature is 8 weeks from the date of manufacturing.

### Instructions for Use:

 (refer to OxyPlate™ product insert for information)

Before use, warm Strep A OxyPlates™ to room temperature. Remove the plate from the protective pouch, and handle OxyPlate™ from the sides to prevent damaging the anaerobic seal. Examine plates for contamination, evidence of oxidation / discoloration (i.e. plate is brown, instead of dark red), and the expiration date.

When streaking or inoculating the surface of an OxyPlate™, microorganisms deposited in the ring impression may grow and spread under the ring when the dish is sealed. Thus, control of streaking technique is at the discretion of the end-user.

Inoculate Strep A OxyPlates™ using the laboratory's approved technique. Stab the agar several times.

After inoculation is complete, invert plates and incubate in an **aerobic** environment. Do **not** stack traditional petri-dishes on top of OxyPlates™, as anaerobic seal damage may occur. Use an appropriate indicator (such as OxyBlue™) inside the plate to test / confirm anaerobiosis.

### Quality Control:

Oxyrase, Inc. certifies that samples of each lot were quality control tested and performed acceptably according to Oxyrase, Inc.'s specifications, which include Clinical and Laboratory Standards Institute (M22-A3: Quality Assurance for Commercially Prepared Microbiological Culture Media). The following tests were confirmed:

<u>Organism</u>	<u>ATCC #</u>	<u>Results</u>
<i>S. pyogenes</i>	19615	growth in 18 – 24 hrs.; double hemolysis
<i>S. aureus</i>	25923	inhibited growth
<i>E. coli</i>	25922	inhibited growth

### Guarantee:

If Strep A OxyPlates™ arrive contaminated and or oxidized, or fail when used as specified, Oxyrase, Inc. will refund your purchase price. To receive a product refund, write or call Oxyrase Inc. with the product lot number found on the plate in question (a return of defective product may be required for further investigation and evaluation). Oxyrase, Inc. is available to answer any questions about this product and its applications.

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ATCC is a trademark of the American Type Culture Collection

1. Murray, P.R., E.J. Baron, M.A. Pfaller, F.C. Tenover, and R.H. Tenover (eds.). 1986. Manual of Clinical Microbiology. 6: 282.
2. Roantree, R. J., L. A. Rantz, and E. J. Haines. 1958. A Medium Containing Nucleic Acid, Maltose, and Antibiotics for the Isolation of Group A Hemolytic *Streptococci*. J. Lab. Clin. Med. 52: 496-500.
3. Bernheimer, A. W., and M. Rodbart. 1948. The Effect of Nucleic Acids and of Carbohydrates on the Formation of Streptolysin. J. Exper. Med. 88: 149-168.
4. Caseman, E.P. 1947. A Noninfusion Blood Agar Base for *Neisseriae*, *Pneumococci* and *Streptococci*. Am. J. Clin. Pathology. 17: 281-289.
5. Adler, H.I., Crow, W.D., Hadden, C.T., Hall, J., and Machanoff, R. 1983. New Techniques for Growing Anaerobic Bacteria. Biotechnol. Bioeng. Symp. 13: 153-161.