

## Oxvrase, Inc.

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# Schaedler Blood Agar OxyPlate™ Product Insert

Each Schaedler OxyPlate<sup>™</sup> creates and maintains an anaerobic environment without the need for chambers, bags, or jars. This simplifies working with anaerobes.

OxyPlates<sup>TM</sup> are made OxyPRAS Plus® with the use of The Oxyrase® Enzyme System, which creates anaerobiosis. The OxyDish<sup>TM</sup> is specially designed to create a seal that maintains the anaerobic environment.

Each  $OxyPlate^{TM}$  conforms to the specifications of PRAS media, and are used for the isolation and cultivation of anaerobic bacteria from a variety of clinical and non-clinical sources.

#### **Precautions:**

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

#### **Product Performance:**

Schaedler medium, with blood, vitamin  $K_1$ , and hemin, is an enriched, general purpose medium useful for the isolation of anaerobes (1,2,3). Vitamin  $K_1$  and hemin provide nutrients for some strains of the pigmenting *Bacteriodes* group, and enhances the growth of some *Bacteroides sp.* and some gram-positive, non-spore forming anaerobes (4,6). Defibrinated sheep blood provides additional nutrients and enables the demonstration of hemolytic reactions. The Oxyrase® Enzyme System is first added to the agar media, to reduce it before sterilization to prevent the formation of undesirable oxidation products. It is added a second time to remove oxygen from within the agar and from the confined head space within the OxyPlate<sup>TM</sup>. The unique OxyDish<sup>TM</sup> design maintains anaerobiosis within the sealed plate (5). OxyPlates<sup>TM</sup> can be opened and closed several times, and will regenerate and maintain anaerobic conditions.

Media Formulation (per liter)	Initial pH: 7.3 (+/- 0.2)
Enzymatic Digest of Casein	2.5 <b>g</b>
Enzymatic Digest of Animal T	Tissue $2.5 g$
Tryptic Soy Broth	10.0 <b>g</b>
Yeast Extract	5.0 <b>g</b>
Dextrose	5.0 <b>g</b>
Tris (hydroxymethyl) Amino l	Methane 3.0 g
L-Cysteine	$0.3\ \mathbf{g}$
Agar	13.5 <b>g</b>
Hemin	10.0 <b>mg</b>
Vitamin K <sub>1</sub>	1.0 <b>mg</b>
Sheep Blood	35.0 mL
Deionized water	(made up to final volume)
Oxyrase <sup>®</sup> 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:

OxyPlates<sup>TM</sup> grow of strict and facultative anaerobes. Additional testing may be needed to further identify microorganisms grown on the OxyPlate<sup>TM</sup>.

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

### **Handling and Storage Instructions:**

Schaedler OxyPlates<sup>TM</sup> plates will arrive at room temperature. The following storage options are listed below:

- 1. <u>Long Term Storage</u>: 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 manufacturing.
- 2. <u>Short Term Storage</u>: 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<sup>™</sup> product insert for info.) Before use, warm Schaedler OxyPlates<sup>™</sup> to room temperature. Remove the plate from the protective pouch, and handle OxyPlate<sup>™</sup> from the sides to prevent damaging of 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<sup>TM</sup>, 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.

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

## **User 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>	ATCC #	Results
B. fragilis	25285	growth in 2-3 days
C. perfringens	13124	growth in 2-3 days; hemolysis
F. nucleatum	25586	growth in 2-3 days
P. levii	29147	growth in 2-3 days; brown/black pigment
P. anaerobius	27337	growth in 2-3 days
P. mirabilis	12453	growth in 2-3 days, no swarming

## Guarantee:

We guarantee 30 days of shelf-life (for both RT and CT) from shipment date. If a longer shelf-life is needed, this should be arranged at the time your order is placed.

If Schaedler OxyPlates™ fail to arrive with at least a 4 week shelf life, are 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

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