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Phenylethyl Alcohol (PEA) OxyPlate Product Insert

Phenylethyl Alcohol (PEA) OxyPlates™ are used for the isolation and cultivation of most obligately anaerobic bacteria. PEA inhibits most Gram-negative facultatively anaerobic bacteria, such as those of the family Enterobacteriaceae, and *Staphylococcus aureus*. It is especially useful in the selective isolation of anaerobes from a variety of clinical and non-clinical materials.

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

OxyPlates™ are made PRAS (Pre-Reduced Anaerobically Sterilized) with our Oxyrase® Enzyme System and unique OxyDish™ plate design. The OxyDish™ is specially designed to create a seal that maintains anaerobiosis. OxyDish™ has a track on the outside of the base and keys inside the lid that ride on that track. The open (vented) position is considered the highest point of the lid as it sits on the rails. The closed position (sealed) is considered the lowest point of the lid as it sits on the rails.

Precautions:
Phenylethyl Alcohol (PEA) OxyPlates™ are for In-Vitro Use only. OxyPlate™ PEA Blood Agar plates are packaged aseptically and must be handled aseptically to maintain sterility during use. A **Safety Data Sheet** is available on our website.

Product Characteristics:
Phenylethyl alcohol medium with blood and vitamin K1, is an enriched, selective medium useful for the isolation of anaerobes (1,2,3,4). Vitamin K1 enhances the growth of some *Bacteroides sp*. PEA selectively reduces the growth of facultatively anaerobic gram negative bacteria, without affecting the growth of gram positive microorganisms. In addition, the phenylethyl alcohol keeps *Proteus sp*. from swarming without inhibiting the growth of obligately anaerobic bacteria.

The Oxyrase® Enzyme System used in OxyPlates™ maintains the medium in a reduced state for storage and during use. The Oxyrase® Enzyme System prevents the formation of undesirable oxidation products in these OxyPlates™. The unique OxyPlate™ design maintains anaerobiosis within the sealed plate. OxyPlates™ can be opened and closed several times and will regenerate and maintain anaerobic conditions.

Media Formulation (per liter)	Initial pH: 7.45 (+/- 0.15)
Enzymatic Digest of Casein	15.0 g
Enzymatic Digest of Soybean Meal	5.0 g
Sodium Chloride	5.0 g
Phenylethanol	2.5 g
Agar	15.0 g
Vitamin K1	1.0 mg
Sheep's Blood	50.0 mL
Sodium Bisulfite	0.1 g
Oxyrase® Enzyme System	- proprietary -
Deionized water	(made up to final volume)

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

Limitations:
Detection of growth or pigmentation change of slower growing anaerobes may require a longer incubation time on this medium.
Plates may only allow for growth of select organisms. Additional testing may be required to identify various colony types grown.

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

Handling and Storage Instructions:
Phenylethyl Alcohol (PEA) OxyPlates™ will arrive at room temperature. The following storage option is listed below.
Storage: Store the product at 2°C to 8°C. Expiration date is **3 months** from the date of manufacture. Refer to plate/label for actual expiration date.

Instructions for Use:
OxyPlates™ should be stored in an open position. Simply remove the plate from the bag and use. If OxyPlate™ is closed, open the plate as follows:
1. Place the closed OxyPlate™ onto the work surface in the upright position.
2. Grasp the lid of the plate with your thumb and finger.
3. Put light, downward pressure on the plate while turning it counterclockwise.
4. Lift the lid from the base.
5. Streak the plate.

To close the OxyPlate™:
1. Place open Oxyplate™ on the work surface in the upright position.
2. Grasp the lid between your thumb and finger.
3. Put light, downward pressure on the plate, while turning it clockwise.
4. The ring in the lid contacts the agar surface and forms a seal to close the plate.
5. Incubate the closed OxyPlate™ within a 5-10% CO2 environment, in an inverted position (base up – lid down).
6. Alternatively, some microbiologists may find they can open-close OxyDish™ with gloved hands. Simply hold the base in place with gloved fingers while turning the lid counterclockwise to open or clockwise to close the dish.

Before use, warm PEA OxyPlates™ to room temperature. Remove the plate from the protective pouch and handle OxyPlate ™ from the sides to prevent damage to 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, breaking the seal. 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™, 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:

Organism	ATCC #	Results
B. fragilis	25285	growth in 2-3 days
S. aureus	25923	growth in 2-3 days/beta hemolysis (partial inhibition)
P. mirabilis	12453	Swarming inhibited for three days
S. pyogenes	19615	growth in 2-3 days

Guarantee:
We guarantee 28 days of shelf-life stored at 2°C to 8°C from the shipment date. If a longer shelf-life is needed, this should be arranged at the time your order is placed.

If Phenylethyl Alcohol (PEA) OxyPlates™ fail to arrive with at least a 4 week shelf life, are contaminated and or oxidized, or fail when used as specified under recommended storage and use conditions, Oxyrase, Inc. will refund your purchase price. To receive a product refund, write or call Oxyrase Inc. with the product lot number printed directly 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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4. Allen, S.D., Siders, T.A., and Marler, J.M. 1985. Isolation and Examination of Anaerobic Bacteria. Manual of Clinical Microbiology. 4: 413-433.
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