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Kanamycin, Vancomycin, Laked Blood (KVL) OxyPlate™ Product Insert

KVL OxyPlate™ contains Kanamycin and Vancomycin for the selective isolation and cultivation of anaerobic bacteria from a variety of clinical and non-clinical sources. Each KVL 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 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:

KVL 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:

The KVL OxyPlate™ contains Tryptic Soy Agar (TSA) medium with blood, vitamin K1, and hemin. It is an enriched, general-purpose medium useful for the isolation of anaerobes. Vitamin K1 and hemin provide nutrients for some strains of the pigmenting *Prevotella* group and enhances the growth of some *Bacteroides spp*. and some gram-positive, non-spore-forming anaerobes. Vancomycin and Kanamycin aid in the selective isolation of gram-negative anaerobes, especially Bacteroides. Kanamycin inhibits protein synthesis in susceptible microorganisms and Vancomycin inhibits gram-positive bacteria by interfering with cell wall synthesis. Laked blood improves pigmentation of *Prevotella*. The Oxyrase® Enzyme System used in the OxyPlate™ provides a reduced medium before sterilization and 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 PRAS plates. The unique OxyDish™ design maintains anaerobiosis within the sealed plate, which allows OxyPlatesTM to be opened and closed several times, and to regenerate and maintain anaerobic conditions.

Media Formulation (grams / liter)

Initial pH: 7.55 (+0.45)

Pancreatic Digest of Casein	15.0 g
Peptic Digest of Soybean Meal	5.0 g
Yeast Extract	5.0 g
Sodium Chloride	5.0 g
L-Cysteine	0.6 g
Agar	15.0 g
Hemin	5.0 mg
Vitamin K1	1.0 mg
Vancomycin	1.1 mL
Kanamycin	2.3 mL
Laked Sheep Blood	35.0 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 to meet performance criteria.

Limitations:

Plates may only allow for growth of select microorganisms. Additional testing may be required for microorganisms grown on KVL OxyPlates™.

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

Handling and Storage Instructions:

KVL OxyPlates™ will arrive at room temperature.
Store the product at 2°C to 8°C. The expiration date is **3 months** from the date of manufacture.
Storage above 25°C may cause excessive moisture in plates.

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).

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 KVL 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
C. perfringens	13124	No growth in 2-3 days
S. aureus	25923	No growth in 2-3 days
E. coli	25922	Inhibition
P. melaningenica	25845	Growth in 2-3 days

Guarantee:

We guarantee 28 days from shipment date. If a longer shelf-life is needed, this should be arranged at the time your order is placed.

If KVL OxyPlates™ fail to arrive with at least a 28 day 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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