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KV 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 OxyPRAS Plus® with our unique OxyDish™ plate design, and the use of The Oxyrase® Enzyme System. The OxyDish™ is specially designed to create a seal that maintains anaerobiosis.

Each OxyPlate™ 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:

*KVL OxyPlates™ plates are for In-Vitro Use only. OxyPlates™ 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:

The KVL OxyPlate™ contains Tryptic Soy Agar (TSA) medium with blood, vitamin K_1, and hemin. It 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 (4,7). Vancomycin and Kanamycin aid in the selective isolation of gram negative anaerobes, especially *Bacteroides* (8). Kanamycin inhibits protein synthesis in susceptible microorganisms and Vancomycin inhibits gram-positive bacteria by interfering with cell wall synthesis (5). Laked blood improves pigmentation of the *Bacteriodes melaninogenicus - Bacteriodes asaccharolyticus* group (6). The Oxyrase® Enzyme System is first added to the agar media, to reduce medium 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™. The unique OxyDish™ design maintains anaerobiosis within the sealed plate (9), which allows OxyPlates™ to be opened and closed several times, and to regenerate and maintain anaerobic conditions.

Media Formulation (per liter)		Initial pH: 7.3 (+/- 0.2)	
Pancreatic Digest of Casein	15.0 **g**	Hemin	5.0 **mg**
Peptic Digest of Soybean Meal	5.0 **g**	Vitamin K	1.0 **mg**
Yeast Extract	5.0 **g**	Vancomycin	1.1 **mL**
Sodium Chloride	5.0 **g**	Kanamycin	2.3 **mL**
L-Cysteine	0.6 **g**	Laked Sheep Blood	35.0 **mL**
Agar	15.0 **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:

Plates may only allow for growth of select microorganisms. Additional testing may be required to 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. 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 manufacturing.
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 info.)

Before use, warm KVL OxyPlates™ to room temperature. Remove the plate from the protective pouch, and handle OxyPlate™ 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 clear 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.

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.

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:

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	inhibited growth in 2-3 days

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 KVL 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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