

## **Product Manual**

#### [ Product Name ]

Oxidase Test Reagent

[ Product Code and Packing Specification ]

Code	Туре	Specifications
029172	Liquid	50 test/box

### [Product Usage]

Quality control is required for oxidase assays.

## **Test Pinciple**

The oxidase oxidizes cytochrome C, and the oxidized cytochrome C then oxidizes the pphenylenediamine reagent to form a purple complex, producing a color reaction.

#### [Formulation]

Formulation (per vial)	Content	
N,N,N',N'-Tetramethyl-p- phenylenediamine hydrochloride	0.025g	
Distilled water	2.5mL	

#### **Instructions**

- 1. Add 1 drop of reagent to a small piece of clean filter paper, just enough to wet it;
- 2. Use a glass rod or inoculation loop (platinum or plastic) to pick up an appropriate amount of fresh bacterial moss and apply it on the paper;
- 3. Interpretation of results: blue-purple color appears within 30 seconds for positive, delayed reaction or no color change for negative.

#### **Quality Control**

- 1. Appearance: Colorless to light gray liquid, clear without precipitation.
- 2. Biology: Blue-purple color appears within 30 seconds as positive, delayed reaction or no color change as negative.

Quality control strain and number	Quality control requirement
Pseudomonas aeruginosa ATCC27853	Turns blue-purple, positive reaction;
Escherichia coli ATCC25922	Does not change color, negative reaction

## **Storage Conditions and Shelf Life**

Store at 2-8°C away from light, valid for one year.

### **(Precautions)**

- 1. After using the oxidase reagent, the lid should be covered and tightened in time, put back into the packaging box, and stored at 2~8°C away from light. If the reagent turns purple, it means that it has expired and cannot be used again.
- 2. The oxidase test must use fresh colonies cultured on solid culture medium for 18-24h. Colonies on EMB agar, iron-containing culture medium or glucose-containing culture medium or colored colonies cannot be used
- 3. The amount of reagent added to the filter paper should be just enough to soak it. Generally, one drop on the paper can be used for a test. If the paper is too wet, it will affect the contact between the bacterial moss and the air, delay the reaction, and cause false negatives
- 4. When using platinum or plastic inoculation loops or glass rods for oxidase tests, the presence of any iron (nickel-chromium alloy) can catalyze the oxidation reaction, resulting in false positives.

## **Waste Disposal**

After testing, the contaminated items were sterilized by high pressure sterilization at 121°C for 30 minutes.

# **[Executive Standard]**

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# **[Explanatory Version]**

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