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MASTDISCS® *ID*
Oxidase Discs

D57/D57C

Intended use
A disc test for the rapid detection of cytochrome oxidase enzyme (Oxidase) in bacteria.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents
100 discs in a vial (D57) or a pack of 5 cartridges (D57C), each cartridge containing 50 discs.

Formulation*
6mm diameter filter paper discs impregnated with N,N,N',N'-tetramethyl-1,4-phenylenediamine.

Storage and shelf life
Store at 2 to 8°C in the containers provided until the expiry date shown on the pack label. Allow to equilibrate to room temperature before opening.

Precautions
For *in vitro* diagnostic use only. Observe approved hazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Refer to Product Safety Data sheet (available on request or via MAST® website).

Materials required but not provided
Standard microbiological supplies and equipment such as loops, MAST® selective supplements, swabs, applicator sticks, incinerators and incubators, etc., as well as serological and biochemical reagents and additives such as blood.

Procedure
1. Using forceps, place one Oxidase Disc onto a suitable surface e.g. a microscope slide and choose a well-separated and representative colony from the culture under test. It is preferable to use young, fresh, cultures as older growth may produce unreliable results.
2. Remove the chosen colony from the culture plate using a wooden applicator stick. DO NOT USE A NICHROME WIRE LOOP AS THIS WILL PRODUCE FALSELY POSITIVE REACTIONS.
3. Gently rub the colony onto the disc and observe for the development of a colour change within 10 seconds.
4. Alternatively, prepare a suspension of test organism equivalent in density to a MacFarland 3 standard in sterile distilled or deionised water. Place 1ml of suspension into a sterile tube and add one disc. Gently shake the tube and leave at room temperature for 15 minutes and observe for development of a deep purple colour.

Interpretation of results
1. Positive result – Development of a deep purple to blue colour change within the times specified for each test method indicates oxidase production.
2. Negative result – No purple to blue colour or colour change within the time specified for each test method.

Note: Microorganisms are considered oxidase positive when the colour change to dark purple within 5 to 10 seconds.

Quality control
Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate a positive reaction and at least one organism to demonstrate a negative reaction. Do not use the product if the reactions with the control organisms are incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result
Pseudomonas aeruginosa ATCC® 27853	Positive
Neisseria gonorrhoeae ATCC® 49226	Positive
Staphylococcus aureus ATCC® 9144	Negative
Escherichia coli ATCC® 25922	Negative

Limitations
It is recommended that biochemical and/or serological tests are performed on colonies from pure culture to confirm identification.

Organisms, which have produced acid from carbohydrate fermentation e.g. from growth on MacConkey agar, should be subcultured to another medium before testing.

Colonies picked from media containing nitrates may produce unreliable results.

Media containing a high proportion of blood may yield false positive results.

References
Bibliography available on request.

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*Formulation may change to meet performance criteria