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MASTDISCS® *ID*
Optochin Discs

D42/D42C

Intended use
For the identification of *Streptococcus pneumoniae.*

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents
100 discs in a vial (D42) or a pack of 5 cartridges (D42C), each cartridge containing 50 discs.

Formulation*

Material:	Content per disc:
Optochin	5µg

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 biohazard 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.

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

Procedure
1. Heavily inoculate a blood agar plate with the test alpha haemolytic streptococci.
2. Place a Optochin Disc on to the inoculated medium.
3. Alternatively several strains may be radially streaked onto a plate, the disc being placed in the centre allowing a standard sensitive organism to be used for comparison.
4. Incubate for 18 to 24 hours at 37°C in 10% CO_2.

Interpretation of results
A clearly defined zone of inhibition of growth of greater or equal to 14mm diameter around the disc or along a stroke of growth indicates that the test organism is *Streptococcus pneumoniae.*

An Optochin Disc placed upon a primary culture from a sputum or pus specimen is particularly useful giving an indication of the presence of pneumococci by diminution of growth around the disc.

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
Streptococcus pneumoniae ATCC® 49619	≥ 14mm
Streptococcus pneumoniae ATCC® 6305	≥ 14mm
Streptococcus pyogenes ATCC® 19615	No zone

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

Approximately 4 to 5% pneumococci are optochin resistant.

References
Bibliography available on request.

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*Formulation may change to meet performance criteria