



Mast Group Ltd.
Mast House, Derby Road, Bootle
Liverpool, Merseyside, L20 1EA
United Kingdom
Tel: + 44 (0) 151 472 1444
Fax: + 44 (0) 151 944 1332
email: sales@mastgrp.com
Web: www.mastgrp.com

Mast Diagnostica GmbH
Feldstrasse 20
DE-23858 Reinfeld
Germany
Tel: + 49 (0) 4533 2007 0
Fax: + 49 (0) 4533 2007 68
email: mast@mast-diagnostica.de
Web: www.mastgrp.com

Mast Diagnostic
12 rue Jean-Jacques Mention
CS91106, 80011 Amiens, CEDEX 1
France
Tél: + 33 (0) 3 22 80 80 67
Fax: + 33 (0) 3 22 80 99 22
email: info@mast-diagnostic.fr
Web: www.mastgrp.com



MASTDISCS®

Antimicrobial Susceptibility Test Discs

MASTDISCS®. An extensive range of individual antimicrobial susceptibility test discs in glass vials and plastic dispensing cartridges.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents: 100 discs in a vial or a pack of 5 cartridges each cartridge containing 50 discs.

Formulation*

6mm diameter filter paper discs printed with an appropriate identification code of letters and/or numbers and impregnated with accurately assayed quantities of antimicrobial agent.

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. Return to the refrigerator promptly after use.

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. Suitable interpretive criteria from standardised reference methods. MAST® DiscMaster Dispenser.

Procedure

MASTDISCS® should be used according to an appropriate standardised susceptibility test method. Various alternative methodologies are available and **MASTDISCS®** are compatible with these.

1. Remove the **MASTDISCS®** container from the refrigerator and allow to equilibrate to room temperature before opening.
2. Using a sterile needle or forceps, transfer each disc required onto the surface of a suitable plate of MAST® susceptibility test medium e.g. Mueller-Hinton Agar (DM170) dried and pre-inoculated with test organism according to the methodology followed.
3. If using **MASTDISCS®** in cartridges, load each cartridge required into a MAST® DiscMaster Dispenser.

4. Place the loaded DiscMaster Dispenser over the Petri Dish and dispense discs (see DiscMaster instructions for full details).
5. Incubate plates in air at 35 to 37°C for 18 to 24 hours (or alternative incubation conditions according to the methodology followed).
6. Measure (to the nearest whole mm) and record the diameter of any zones of inhibition that are observed around the antibiotic impregnated discs.

Interpretation of results

Interpret measured zones of inhibition by reference to published tables of critical zone diameter breakpoints provided by appropriate authorities and classify test isolate as Susceptible (S), Intermediate (I) or Resistant (R).

Quality control

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate a correct susceptibility pattern. 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 | |
|--|---------------------------------|
| <i>Escherichia coli</i> ATCC® 25922 | Correct susceptibility pattern* |
| <i>Pseudomonas aeruginosa</i> ATCC® 27853 | Correct susceptibility pattern* |
| <i>Staphylococcus aureus</i> ATCC® 25923 | Correct susceptibility pattern* |

*See appropriate quality control table

Limitations

Any deviation from the prescribed method may produce incorrect results.

The latest published version of the method used should be consulted for complete details of test procedures and interpretive criteria.

References

Bibliography available on request.