

## MASTDISCS® Antimicrobial Susceptibility Test Discs

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

**NOT FOR CLINICAL DIAGNOSTIC USE. FOR VETERINARY 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 use with non-human derived specimens 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 such as 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 in veterinary standard methods for critical zone diameter breakpoints 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

Mast antimicrobial susceptibility test discs products code .../NCE not to be used for diagnostic testing with clinical isolates i.e. those derived from human specimens. 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.