

## MASTRING-S®

### Intended Use

A ring device carrying 6 or 8 antibiotic impregnated tips allowing the simultaneous application of the equivalent individual antimicrobial susceptibility test discs.

FOR IN VITRO DIAGNOSTIC USE ONLY

### Contents

25, 50 or 100 MASTRING-S® depending on specification (See pack label) and a silica gel desiccant capsule.

### Formulation\*

Filter paper printed with 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 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.

### Procedure

MASTRING-S® should be used according to an appropriate standardised susceptibility test method. Various alternative methodologies are available and MASTRING-S® is compatible with these.

1. Remove the MASTRING-S® container from the refrigerator and allow to equilibrate to room temperature before opening.
2. With the MASTRING-S® container label uppermost, remove sealant tape and unscrew the lid. Rings are then presented for use held within a retaining carrier.
3. Using a sterile needle or forceps, transfer one MASTRING-S® onto the surface of a suitable plate of MAST® susceptibility test medium e.g. Mueller-Hinton Agar (DM170D), dried and pre-inoculated with test organism according to the methodology followed.
4. Ensure the ring is in contact with the medium at all points by touching the tips down with a sterile needle or forceps.

5. After use, replace the lid of the MASTRING-S® container and reseal with sealant tape provided. **N.B. It is essential to reseal the containers using the sealant tape provided.**
6. Incubate plates in air at 35 to 37°C for 18 to 24 hours (or alternative incubation conditions according to the methodology followed).
7. Measure (to the nearest whole mm) and record the diameter of any zones of inhibition that are observed around the antibiotic impregnated tips.

### 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.