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# Single Cartridge Hand Dispenser

# **SHD Series**

## Introduction

Single Cartridge Hand Dispenser is a hand dispenser, intended to be used in conjunction with MASTDISCS<sup>®</sup> in cartridges. Where application of a single disc to a test plate is required, the Single Cartridge Hand Dispenser facilitates manual placement of the disc and is a convenient alternative to the use of forceps.

(Note- MASTDISCS<sup>®</sup> in cartridges are for determination of the susceptibility of common, rapidly growing bacterial and fungal pathogens isolated from clinical specimens to antimicrobial chemotherapeutic agents by the agar diffusion test procedure, or alternatively to provide a presumptive identification based on their response to specific antimicrobial agents)

## Intended use

The Single Cartridge Hand Dispenser allows dispensing and placement of an individual antimicrobial susceptibility or identification disc onto a plate of inoculated culture medium when performing manual agar diffusion test procedures, such as antimicrobial susceptibility or disc based presumptive identification tests.

The device is intended to be used by trained laboratory users.

#### Components

SHD1 packs contain one dispenser whilst SHD5 packs contain 5 dispensers. Other pack sizes may be available from time to time.

#### Storage and shelf life

Single Cartridge Hand Dispensers can be stored at ambient temperature. Once in use and loaded with a cartridge of discs they can be stored at 2 to 8°C, provided the discs and holder are contained in suitable airtight storage container which incorporates active silica gel desiccant. Always allow the container holding the cartridge and dispenser to equilibrate to room temperature before opening.

#### Warnings and precautions

- 1. The Single Cartridge Hand Dispensers are only for use by trained laboratory staff.
- All microbiological cultures and equipment used to transfer and manipulate them should be treated as infectious. Sterilise all biohazard waste before disposal by autoclaving.
- 3. Do not store **MAST**DISCS<sup>®</sup> in cartridges once loaded into the Single Cartridge Hand Dispenser at temperatures colder than -25°C.
- 4. Do not store or transport **MAST**DISCS<sup>®</sup> in cartridges once loaded into the Single Cartridge Hand Dispenser in or over dry ice (solid form of carbon dioxide).
- Allow storage containers containing MASTDISCS<sup>®</sup> in cartridges loaded into the Single Cartridge Hand Dispenser to come to room temperature before opening. Replace MASTDISCS<sup>®</sup> in cartridges loaded into the Single Cartridge Hand Dispensers back into

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their airtight storage containers and to the refrigerator once disc application is completed.

- 6. The Single Cartridge Hand Dispenser does not "lock out" once a cartridge is empty. Ensure there are sufficient discs in the cartridge to complete testing of each plate selected for application of a disc.
- 7. In case of contact with an inoculated plate the device can be decontaminated by immersion in 70% alcohol solution (methanol, ethanol or iso-propanol).

#### Materials required but not provided

Standard microbiological supplies and equipment such as loops, suitable AST culture media and additives such as defibrinated blood, swabs, an incubator set at the required temperature, McFarland standards and turbidometer,

#### Procedure

- 1. Hold the dispenser with the flexible sidearm downwards.
- Insert the cartridge into the cylindrical holder with the feet of the cartridge and exposed discs facing downwards.
- 3. Align the projecting lug on the cartridge with the corresponding notch in the Single Cartridge Hand Dispenser.
- 4. Push the **MAST**DISCS<sup>®</sup> cartridge down until it clicks into place.
- 5. To dispense a disc, hold the loaded device over the inoculated plate and push the flexible sidearm towards the cartridge. A single disc will be dispensed.
- Ensure the dispensed disc is fully in contact with agar - press the disc gently down with a sterile disposable inoculation loop or needle. Do not attempt to reposition a disc once it is in contact with the agar surface
- Once all the discs in the cartridge have been used, the empty cartridge can be removed by pulling it upwards. The Single Cartridge Hand Dispenser can be refilled and reused with another full cartridge.

#### Limitations of use

- 1. Antimicrobial disc diffusion tests are appropriate primarily for rapidly growing pathogens. Ensure the correct methodology is consulted when testing fastidious or anaerobic pathogens which may require special procedures.
- The Single Cartridge Hand Dispenser device will accept only MASTDISCS<sup>®</sup> in cartridges. Do not attempt to use the device with cartridges of antimicrobial test discs from any other supplier. This may damage the device.

#### **Quality Control**

Single Cartridge Hand Dispenser is a robust device and should not become damaged in normal use. Check for signs of product wear e.g. cartridge not locating securely. Discard any damaged units.