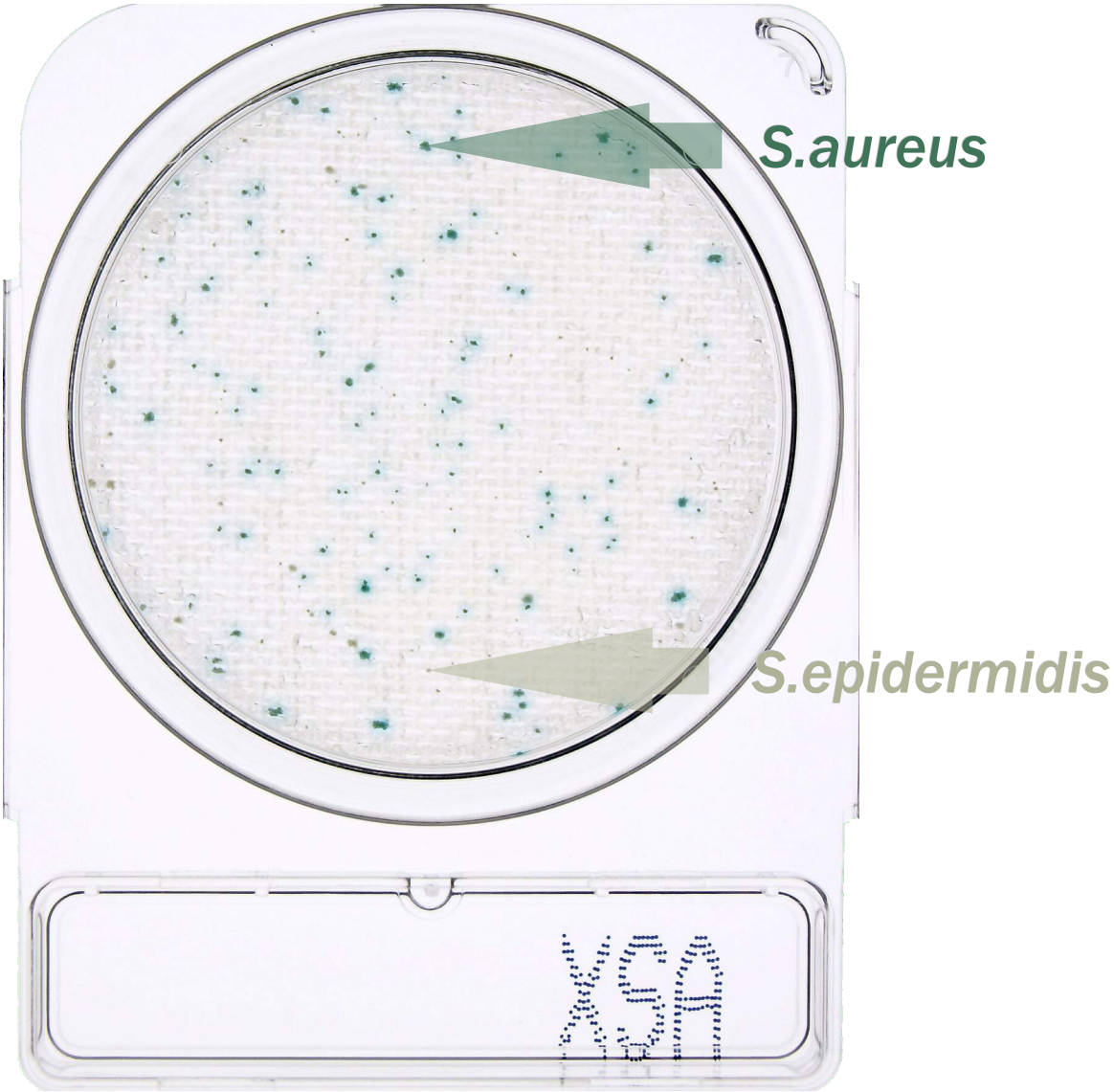
Compact Dry "Nissui" X-SA
For *Staphylococcus aureus*

User's Manual 1



►***Staphylococcus aureus*** **generates Light Blue/Blue colonies.**
Some bacteria other than *Staphylococcus aureus* may grow and generate white colonies.

►**Incubate for 24 ± 2 hours at 35 ± 2 ºC.**

Certificates : (AOAC PTM; MicroVal; Under application)
Storage : Keep at room temperature (1ºC-30ºC)
Shelf life : 12 months after manufacturing
Package : Compact Dry "Nissui" X-SA 40 plates (Code: 06729)
: Compact Dry "Nissui" X-SA 240 plates (Code: 06730)

- Compact Dry is manufactured based on Nissui's original patented technology. -

NISSUI PHARMACEUTICAL CO., LTD.

200908XSA-E01 MN

Compact Dry Preparation

Sample Preparation

User's Manual 2

Open an aluminium pouch.

Take out a set of 4 plates.

(Or take 1 – 3 plates you need and keep the pouch sealed to avoid a quality loss from light and moisture.)

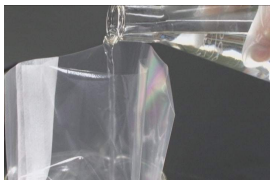
Write appropriate information on a memorandum section.

Dilution Water Preparation (Butterfield's phosphate-buffered diluent)

34 g of KH_2PO_4 and 500 ml of distilled water. Adjust pH to 7.2 with 1 N NaOH. Autoclave 15 min at 121°C.

1:10 Dilution Preparation

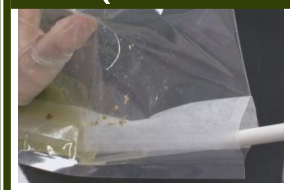
Analyse 50 g from each sub-sample.



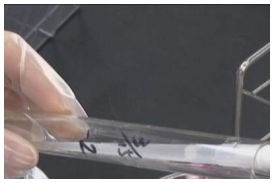
Add 450 ml of Butterfield's phosphate-buffered diluent.

Homogenise in a stomacher for 2 min.
→1:10 Dilution

Further Dilutions (if necessary) (1:100 Dilution Preparation)



Take 1 ml of the 1:10 dilution.



Add it to 9 ml of Butterfield's phosphate-buffered diluent.

Mix well.
→1:100 Dilution

(Not more than 15 min should elapse.)

Inoculation

Pipette 1 ml of a sample.

Take off a lid of a plate.

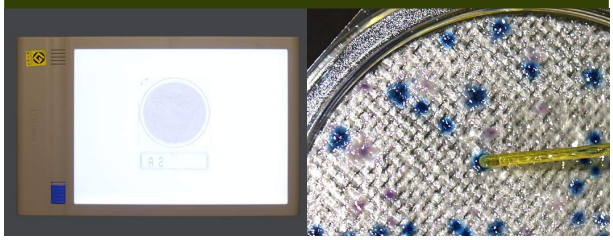
Inoculate the 1 ml sample to the middle of a dry sheet.

Put the lid again.

Incubation

Turn over the plate lidded, put them in an incubator. Incubate for 24 ± 2 hours at 35 ± 2°C. for Compact Dry X-SA.

Interpretation & Colony Fishing



From the backside of the plate, count the number of Light Blue/Blue colonies appeared in the medium. Lighting and using a loupe are useful to count colonies easier.

Preliminary Advice

For user's convenience, "Sample Preparation" section on the page 2 of this user's manual is made with reference to FDA's BAM (Bacteriological Analytical Manual). Depending on user's needs, other official methods can be also used.

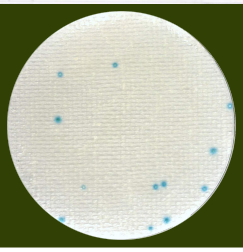
Counting Examples & Precautions

User's Manual 4

(Print this page without margins using A4 (210 x 297 mm) paper, the pictures are printed out as the same as the actual Compact Dry (77 x 58 (x 7) mm).

○: *S.aureus* = 12 colonies

(◇:Bacteria other than *S.aureus* = 2 colonies)

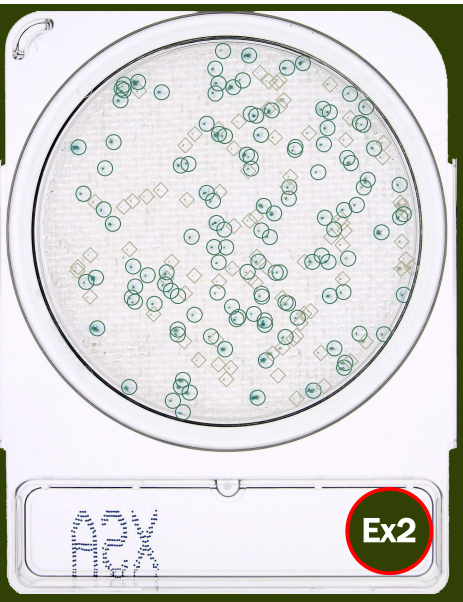


Ex1

Ex Lighting from the back

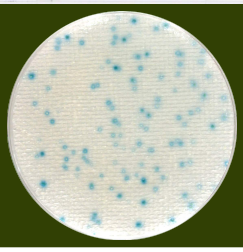
Ex Lighting from the front

In case of more than 300 colonies, the number of colony should be estimated. The average number of colony in the grid (1 cm²) is counted, and then the total number of colony is calculated by multiplying the average number by 20.



○: *S.aureus* = 127 colonies

(◇:Bacteria other than *S.aureus* = 83 colonies)



Ex2

Ex Lighting from the back

Ex Lighting from the front

In case that numerous colonies are observed, a sample extraction should be diluted appropriately, and be inoculated again.

● After opening the aluminium bag, unused plates should be kept in the folded and sealed bag to avoid light and moisture. ● Used plates must be sterilised by autoclaving and disposed according to a local waste management law. ● In case of foodstuffs containing their own enzymes, there are cases where a whole medium of Compact Dry is stained. ● Rarely some bacteria other than *Staphylococcus aureus* may grow and generate red purple colonies. ● The pictures in this manual has colonies of *S.aureus* and *S.epidermidis*. There may be subtle differences if other strains grow. ● Because of the lighting, there may be subtle differences in vision between in the pictures and in actual tests.

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