

## Swann-Morton Study 2009 & 2010

### Executive Summary

#### How:

Testing sites were weekly visited over a period of 6 weeks. Samples were collected from both the "Traditional box" and the "SafeDon box".

Gloves were tested for mould and bacteria. Contact plates were also tested for the amount of contamination on the surface of the box, particularly on the aperture area.

#### Objective:

Compare contamination on gloves taken from different packaging systems

#### Test Method – Determination of glove bioburden:

- Step 1           Gloves were collected and automatically agitated in 100 ml Ringer solution for a period of 2 minutes.
- Step 2           Ringer solution extracts/transfers the microorganisms from the glove into the mixture
- Step 3           Samples of 10 ml of the fluid were inoculated into a Petri Dish with either:
- Tryptone Soya Agar: a media which allow bacteria to grow
  - Sabouraud Dextrose Agar: a media which allow fungi to grow
- Step 4           Tryptone Soya Agar plates (bacteria growth) were incubated at 30 °C +/- 2 °C for a minimum of 4 days
- Sabouraud Dextrose Agar plates (fungi growth) were incubated at 20 °C +/- 2 °C for a minimum of 7 days

#### Test Method – Determination of surface contamination:

- Step 1           Two sample plates were used:
- Tryptone Soya Agar
  - Sabouraud Dextrose Agar
- Step 2           Lids were removed and the agar surface was placed in contact with the packaging system, covering the opening

- Step 3            Using uniform and steady pressure, the agar was pressed onto the surface for appr. 10 seconds
- Step 4            Samples were sealed in a plastic bag and transported back to the laboratory
- Step 5:            Tryptone Soya Agar plates (bacteria growth) were incubated at 30 °C +/- 2 °C for a minimum of 4 days
- Sabouraud Dextrose Agar plates (fungi growth) were incubated at 20 °C +/- 2 °C for a minimum of 7 days

**Results:**

Swann - Morton Study 2009:

*«Overall, bacteria and mould contamination levels were lower on the SafeDon gloves»*

**Result: 92,5% less bacterial contamination**

Swann - Morton Study 2010:

*«Significantly less contamination was found on SafeDon packed gloves as opposed to Tissue Box packaged gloves in all six weeks»*

**Result: 95,9% less bacterial contamination**