

Department	Micro Laboratory	Document no	MICLAB – METHOD 008		
Title	Presence of Viable Spore on Spore Strips				
Prepared by:		Date:		Supersedes:	
Checked by:		Date:		Date Issued:	
Approved by:		Date:		Review Date:	

1. **SCOPE AND APPLICATION**

This general test method applies to the determination of presence of viable spores on biological indicators (spore strips). This procedure applies to biological indicators which have been subjected to sterilisation.

2. **REAGENTS AND MATERIALS REQUIRED**

- 2.1 Tryptone Soya Broth (TSB) (Oxoid CM131) - 10 mls volume in MacCartney bottles.
- 2.2 Sterile forceps.
- 2.3 Laminar flow.
- 2.4 Bunsen Burner.

3. **GENERAL TEST METHOD**

- 3.1 Determine the number of TSB in MacCartney bottles required. One bottle per spore strip is needed, plus one for control.
- 3.2 Place bottles in Biohazard cabinet.
- 3.3 Label each bottle with a load number, job number (if applicable) and date.
- 3.4 Place spore strips in petri dish in Biohazard Cabinet.
- 3.5 Loosen lids on MacCartney bottles.
- 3.6 Using sterile forceps remove spore strip from envelope and aseptically transfer each spore strip into 10 mls of TSB. Replace and tighten lid on bottles.

Note: Flame the neck of the bottle immediately before and after transferring spore strip. Replace lid as soon as possible.
- 3.7 Repeat the above procedure for each spore strip.
- 3.8 Once all test spore strips have been transferred, set up a positive control in the same manner using an unautoclaved spore strip containing viable spores.
- 3.9 Incubate the broth containing spore strip using the following conditions:

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Bacillus stearothermophilus - 55 ± 1°C / 7 days
(Steam sterilisation)

Bacillus subtilis var.niger - 37 ± 1°C / 7 days
(ETO sterilisation)

Bacillus pumilus - 37 ± 1°C / 7 days
(Gamma irradiation)

- 3.10 Check daily (each working day) for growth.
- 3.11 Streak any broths showing turbidity onto TSA plate and incubate overnight at an appropriate temperature, Ref. to 3.9. (Record number of days at which growth became evident).
- 3.12 Confirm growth for presence of the test organism by colony morphology, Gram stain and spore stain, and identification kit if necessary.
- 3.13 Record 7 day results for spore strips showing no growth.

4. REVIEW HISTORY

Version #	Revision History
MICLAB – METHOD 008	New