

SPORE SUSPENSIONS

Geobacillus stearothermophilus Cell Line 7953

Excelsior Code: SUS-02E, SUS-03E, SUS-04E, SUS-05E, SUS-06E
SUS-07E & SUS-08E



Product Description

Pure suspensions of viable spores with a known population and resistance to Steam sterilisation processes.

Indications for Use

Excelsior Spore Suspensions are standardised suspensions of spores appropriate for direct inoculation onto samples for sterility, bio burden and bacteriostasis testing.

Instructions for Use

1. Perform inoculation operations in a clean area which is remote from the sterility testing area.
2. Samples to be inoculated should be representative of product being sterilised.
3. For most purposes, inoculation of product with targeted population level of spores to provide a suitable challenge. Note: Suspensions are standardised on the basis of number of spores per 0.1 mL of suspension.
4. Use a suitable sterile pipette or syringe to accurately measure and deliver the volume of suspension to be utilised.
5. Manually shake vial before each use. Do not vortex.
6. If a syringe is used, disinfect septum surface and pull syringe plunger halfway back. Insert needle through the septum, push the plunger in, and slowly withdraw plunger to fill syringe to desired volume.
7. If a pipette is used, remove cap and septum and insert pipette. Withdraw desired volume.
8. Deposit suspension onto product. The area to be inoculated should be the one most difficult to sterilise. Return vial(s) of remaining suspension to refrigerator storage (2°C to 8°C) after use.
9. Allow product to dry at room temperature (15°C to 30°C) for approximately 24 hours (or until visibly dry). Some devices with small lumens may take longer to dry.
10. Package inoculated product exactly like product being sterilised and identify prominently as “Inoculated Test Samples.”
11. Distribute “Inoculated Test Samples” throughout the sterilizer load, as outlined in associated validation protocol or work instruction specific to your process.
12. After sterilisation cycle is complete, test the inoculated products as soon as possible by aseptically transferring into Soybean Casein Digest Broth (SCDB).
13. Observe tubes daily for growth.

Turbidity = Growth = non-sterile
Clear Medium = no growth = sterile

Culturing: Aseptically transfer the exposed test samples into Soybean Casein Digest Broth (SCDB) as soon as possible following the exposure

Incubation: incubated at 55°C to 60°C. for up to 7 days or for a validated incubation period.

Monitoring: Examine the tubes daily during incubation. Record observations.

Interpretation: Tubes which demonstrate turbidity with cream-coloured sediment are considered positive for growth of *Geobacillus stearothermophilus*. Tubes which remain clear and without sediment formation are considered negative for growth.

Disposal

Autoclave for not less than 30 minutes at 121°C or per other validated disposal cycle prior to discard.

Physical Properties

Organism	<i>Geobacillus stearothermophilus</i> Cell Line 7953
Suspended Volume	10 mL suspended in water for injection (WFI)
Packaging	Pharmaceutical grade glass vial with screw cap and septum

Performance Characteristics

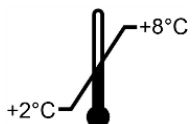




Population	$\geq 1.0 \times 10^2 - 10^8$ spores per 0.1 mL
Saturated Steam (121°C) <i>D</i> value	<p><i>D</i> value at 121°C ± 0.5°C ≥ 1.5 minutes</p> <p>z value: $\geq 6^\circ\text{C}$</p> <p>The z value is based on <i>D</i> values at three temperatures in the range of 110°C to 138°C. Excelsior typically uses <i>D</i> values determined at 110°C, 121°C and 130°C.</p>
Post Market Criteria	<p>Population: 50% to 300% of certified population</p> <p><i>D</i> value: ± 20% of the certified <i>D</i> value</p>

Compliance

ISO 11138-1 sterilisation of healthcare products—biological indicators—Part 1: General Requirements

USP (where applicable)

Storage and Shelf Life

	Refrigerate 2°C to 8°C		Keep away from sunlight
	Do not freeze		Protect from heat and radioactive sources & sterilising agents
Shelf Life	24 months from the date of manufacture		
	Do not use damaged vials of Spore Suspensions. Do not use after the expiration date. The Spore Suspensions contain live cultures and should be handled with care.		

For additional product information:
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