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# CERTIFICATE OF ANALYSIS

## MESA BIOLOGICAL INDICATORS

*Geobacillus stearothermophilus* Stainless Steel Spore Discs

This document certifies that the biological indicators for this lot meets Mesa Labs' quality control specifications.

Thomas Halpenny
Quality Assurance Specialist
Mesa Labs

Manufacture: **19Mar2013**
Release: **21Mar2013**

Catalog #: **3A-6100ST**

Performance Data for Lot # **336463** Batch **12980-46** Expiration Date: **03/2014**

Organism: ***Geobacillus stearothermophilus*** ATCC(R) No. 12980

Nominal Population **$3.7 \times 10^{6}$** CFU* /8mm x 12mm Stainless Steel Disc

$D_{H2O2}$ Value** **2.4** minutes (2.0 +/- 0.2 mg/L $H_2O_2$, 31°C)

* Colony Forming Units
** Determined on primary spore crop, using stainless steel discs in Tyvek envelopes, Fraction-Negative (Spearman-Karber) method. The D-value is reproducible only under the exact conditions under which it was determined. The user would not necessarily obtain the same results. Therefore, the user would need to determine the suitability for its particular use.

Resistance Characteristics: (Based on US Pharmacopeia Calculations)

| AGENT | CONDITIONS | SURVIVES | KILLED |
|---|---|---|---|
| $H_2O_2$ Vapor | 2.0 +/- 0.2mg/L $H_2O_2$ 31°C | **11.0** min. | **25.4** min. |

**Purity:** No evidence of contaminants using standard plate count techniques.
**Incubation**: 7 days at 55 - 60°C in Soybean-Casein Digest Broth.
**Storage:** 60 - 80°F (15 - 27°C), 30 - 70% RH, away from sterilizing agents, direct sunlight, and all other forms of UV light. (Do not Refrigerate)
**Disposal:** Do not use after expiration date. Sterilize all cultures before discarding.


10/22/12

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