BIOMARK Laboratories – INDIA www.biomarklabs.com

CERTIFICATE OF ANALYSIS

PRODUCT: Nitrate broth

PRODUCT CODE NO.: B270I

QUALITY CONTROL TESTS: DEHYDRATED MEDIUM

| PARAMETERS | SPECIFICATIONS/STANDARD VALUES | |
|---|--------------------------------|--|
| COLOR | Cream to yellow | |
| APPEARANCE Homogenous free flowing powder | | |

QUALITY CONTROL TESTS: REHYDRATED MEDIUM

| PARAMETERS | SPECIFICATIONS/STANDARD VALUES |
|------------------------------------|--------------------------------|
| pH(post autoclaving/heating) | 7.0+/-0.2 |
| COLOR (post autoclaving/heating) | Light amber |
| CLARITY (post autoclaving/heating) | Clear to slightly opalescent |

QUALITY CONTROL TESTS : MICROBIOLOGICAL CULTURAL RESPONSE:

Cultural characteristics observed after an incubation at 35-37 °C for 18-24 hours. Nitrate reduction observed on addition of 0.5 ml of sulphanilic acid and 0.5 ml of a- naphthyl amine solution.

| Organism Description | Inoculum (CFU) | Growth | Nitrate reduction |
|--|----------------|-----------|---|
| | | | |
| Acinetobacter calcoaceticus ATCC 23055 | 50-100 | luxuriant | negative reaction |
| Enterobacter aerogenes ATCC 13048 | 50-100 | luxuriant | positive reaction, distinct red-pink colour developed within 1-2 minutes |
| Escherichia coli ATCC25922 | 50-100 | luxuriant | positive reaction, distinct red-pink colour developed within 1-2 minutes |
| Salmonella typhimurium ATCC 14028 | 50-100 | luxuriant | positive reaction, distinct red-pink colour developed within 1-2 minutes |

This is to certify that this lot passes and it confirms to the above-mentioned tests and specifications. The information given here is believed to be correct and accurate, however, both the information and products are offered without warranty for any particulars use, other than that specified in the current Biomark literature. The results reported were obtained at the time of release.

This document has been produced electronically and is valid.