

Certificate of Quality

Product Description: Flip-Top Dilution Bottle with 99ml Butterfield's Buffer
Product Number: FTBFD9960
3M ID: 70201175968
ERP # 7100156114
Lot Number: 335KKN
Expiration Date: 2021-09-24

Performance:

Representative samples of this lot were examined for Chemical/Physical and Toxicity/Growth parameters.

Chemical/Physical Parameters:

Clarity/precipitate: Clear / None

Final pH @ 25° C (Specification is 7.2 +/- 0.2): 7.1

Avg. Fill Volume (99ml +/- 2.0ml): 99.0

Survival of Inoculated Organisms:

Survival of test organisms was evaluated by inoculating low levels of these bacteria into the dilution bottle sample and holding @ 4° C for 1 hour.

| Microorganism Panel | Log Colony Forming Units/ml | |
|---|-----------------------------|----------|
| | Time 0 | One Hour |
| <i>Escherichia coli</i> ATCC 25922 | 2.14 | 2.15 |
| <i>Staphylococcus aureus</i> ATCC 25923 | 2.20 | 2.18 |

The results met specification for survival of test organisms in this product.

Raw milk toxicity analysis:

Raw milk was added to the dilution bottle sample and incubated for 0 and 45 minutes. Standard plate count after 45 minutes of incubation of the diluted raw milk sample show less than 20% decrease when compared to the time 0 count:

Passes

Microbiologically Suitable Water:

Standard plate count specification of <1,000 colonies per ml (tested at least monthly): **Passes**

Total chlorine residual specification of < 0.1 mg per liter (tested at least monthly): **Passes**

Conductance specification (tested at least monthly) of less than 2.0 micromho per cm (at 25°C): **Passes**


Heavy metals (Pb, Cd, Cr, Cu, Ni and Zn) with specification of less than 0.05 mg per liter for each metal and not to exceed 0.1 mg per liter for all metals (tested at least annually): **Passes**

Terminal Irradiation Processing Parameters

This product has been subjected to Gamma irradiation as a terminal process. The minimum and maximum delivered met established specifications for this product.

Approval Status:

This lot was found to be satisfactory for all chemical/physical and toxicity/growth characteristics and was released for commercial sale.

| | |
|----------------|--|
| Signed: |  |
| Name: | Lola K. Johnson |
| Date: | 10/01/2019 9:52 AM |

