QUALITY CONTROL METHOD - 19
Preparation of Lactose Broth

Description:
This quality control procedure is designed to reproducibly prepare lactose broth flasks, used for the differentiation of bacteria in water. This broth is used in QC-3. This procedure should be performed by a trained laboratory technician.

Equipment:
- several 2 liter Erlenmeyer flasks
- Bellco silicone sponge stoppers and/or Rapid-Flo double gauze milk filters
- Steri-wrap II (green)
- rubber bands
- autoclave
- Balance accurate to 0.001 g

Ingredients:
- Lactose broth base (Difco #0004-01-5 or Weber #3083-04 (Becton Dickson)
- Deionized water

Procedure:
1. Purchase Lactose broth base from an approved source.
2. Place a label on package with expiration date marked in bold RED letters
3. Store agar in the refrigerator, in the dark, until used.
4. Add 13g broth base to 1 liter of deionized water or a multiple of the same ratio.
5. Dispense approximately 100 mls into 250ml Erlenmeyer Flasks or approximately 1000 mls into 2 liter Erlenmeyer Flasks using the flask volume graduations.
6. Apply closure to each flask.
6.1 A 250 ml flask closure consists of a Bellco silicone sponge stopper (or equivalent) covered with double layer of green steri-wrap II (or equivalent) and secured with rubber bands.

6.2 A 2 liter flask closure consists of a double layer of steri-wrap (or equivalent) with a single gauze milk filter (or equivalent) sandwiched in between secured with rubber bands.

7. Sterilize in autoclave for 15-20 minutes at 121°C

8. Allow flask to cool to room temperature. Measure pH of one flask to confirm final pH is 6.9 ± 0.2. Discard entire batch if pH is incorrect.