

## TM 2331 - SAUTONS FLUID MEDIUM BASE

### INTENDED USE

For selective enrichment and isolation of Salmonellae from food.

### PRODUCT SUMMARY AND EXPLANATION

Dilute Sautons Medium is used for determining the number of colony forming units (CFU) in vaccines of known potency as per I.P. As per the I.P. method, contents of the freeze-dried vaccine for human use are reconstituted with the diluent stated on the vial. Contents of 5 such containers are pooled and three dilutions of the pooled vaccine are prepared using Sautons Fluid Medium so as to obtain an optimum of 100, 40 and 20 colonies from an inoculum of 0.2 ml. An inoculum of 0.2 ml from each dilution is further inoculated onto L.J. Medium slant surface and incubated at 37°C for 28 days. The vaccine passes the test if 0.1 ml of the reconstituted vaccine contains between 1 x10<sup>5</sup> and 33 x 10<sup>5</sup> colony forming units.

### COMPOSITION

| Ingredients                     | Gms / Ltr |
|---------------------------------|-----------|
| Ferric ammonium citrate (brown) | 0.0167    |
| L-Asparagine                    | 1.330     |
| Citric acid                     | 0.660     |
| Magnesium sulphate heptahydrate | 0.166     |
| Dipotassium hydrogen phosphate  | 0.177     |
| Sodium dihydrogen phosphate     | 0.056     |
| Sodium chloride                 | 0.035     |
| Polysorbate 80 (Tween 80)       | 0.833     |

### PRINCIPLE

Salts like ferric ammonium citrate and magnesium sulphate provide inorganic ions and nitrogen sources essential for the growth of Mycobacteria. Asparagine is added to promote the initiation of growth and increase the growth rate.

### INSTRUCTION FOR USE

- Dissolve 3.19 grams in 1000 ml distilled water containing 20 ml glycerol.
- Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 121°C for 15 minutes.
- Cool to 45-50°C. Mix well and dispense as desired.

### QUALITY CONTROL SPECIFICATIONS

**Appearance of Powder** : White to cream homogeneous free flowing powder.  
**Appearance of prepared medium** : colourless clear to slightly opalescent solution.  
**pH (at 25°C)** : 7.2±0.2

### INTERPRETATION

Cultural response observed after an incubation.

| Microorganism                  | ATCC  | Inoculum (CFU/ml) | Growth | Incubation Temperature | Incubation Period |
|--------------------------------|-------|-------------------|--------|------------------------|-------------------|
| <i>Mycobacterium smegmatis</i> | 14468 | 50-100            | Good   | 35-37°C                | 2 weeks           |
| <i>M. tuberculosis H37 RV</i>  | 25618 | 50-100            | Good   | 35-37°C                | 2 weeks           |

#### PACKAGING:

In pack size of 100 gm and 500 gm bottles.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

#### REFERENCES

1. Atlas R. M., 1993, Handbook of Microbiological Media, Parks L (Ed.) CRC Press, Inc.
2. Indian Pharmacopoeia, 1996, Ministry of Health and Family Welfare, Govt. of India.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2<sup>nd</sup> Edition.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock, D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.



**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
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