

## 9817 ANSR for *Salmonella* Enrichment Broth 3B

### Intended Use

ANSR for *Salmonella* Enrichment Broth 3B is used in the Neogen ANSR for *Salmonella* test method for the presumptive identification of *Salmonella* spp. from pasteurized egg products.

### Product Summary and Explanation

Salmonellosis continues to be an important public health problem. Infection with non-typhi *Salmonella* spp. often causes mild, self-limiting illness.<sup>1</sup> The illness results from consumption of raw, undercooked, or improperly processed foods contaminated with *Salmonella*. Many of these cases of *Salmonella* related gastroenteritis are due to improper handling of poultry products.

### Principles of the Procedure

The ANSR for *Salmonella* method provides for rapid and accurate detection of *Salmonella* spp. in a wide variety of foods and environmental samples. Serovars belonging to both *Salmonella enterica* and *Salmonella bongori* can be detected with the ANSR method.<sup>2,3</sup> Edel and Kamelmacher<sup>1</sup> found that food preservation techniques involving heat, desiccation, preservatives, high osmotic pressure, or pH changes cause sublethal injury to *Salmonella* spp. Enrichment in ANSR for *Salmonella* Enrichment Broth 3B allows for repair of cell damage and facilitates the recovery of *Salmonella* spp. from pasteurized egg products.

### Precautions

1. For laboratory use.
2. **IRRITANT.** Irritating to eyes, respiratory system, and skin.

### Directions

Preparation directions are dependent upon the type of sample tested. Refer to the ANSR for *Salmonella* test system package insert for complete instructions.

### **ANSR for *Salmonella* Enrichment Broth 3B**

Rehydrate 39.2 g of ANSR for *Salmonella* Enrichment Broth 3B with 1 L sterile water pre-warmed to 36°C.

### **SAMPLE ENRICHMENT**

**For use pasteurized egg products (validated for: pasteurized dried whole egg, pasteurized dried egg white, pasteurized liquid whole egg and pasteurized frozen egg yolk).**

1. Weigh 100 g sample in a Stomacher-type bag.
2. Add 900ml of **ANSR for *Salmonella* Enrichment Broth 3B** (Neogen item 9817) (pre-warmed to 36°C) to the bag.
3. Homogenize (Stomacher, etc.) the sample as appropriate for the sample type.
4. Incubate the sample at 36 + 1°C for **24–26 hours**. **Note:** for pasteurized dried whole egg, incubate for **26 hours**.

### Quality Control Specifications

#### Dehydrated

**Appearance:** Medium is homogenous, free-flowing and light beige.

#### Re-hydrated

**Appearance:** Dark amber, clear without precipitate.

**Solubility:** 8.82 grams dissolves in 225 mL of water.

**pH:** pH of the re-hydrated medium should be  $7.2 \pm 0.2$ .

**Performance:** Stomacher-type bags were inoculated with the following organisms and the procedure was followed using the package insert:

| Microorganism   | ANSR for <i>Salmonella</i> test results |
|---|---|
| <i>S. enterica</i> subsp. <i>enterica</i> serovar <i>Cholerasuis</i> ATCC 13076 | Positive                                |
| <i>E. coli</i> ATCC 25922   | Negative                                |

### **Test Procedure**

Refer to the ANSR for *Salmonella* package inserts for complete details.

### **Results**

Refer to ANSR for *Salmonella* package inserts for complete details. The presumptive identification of *Salmonella* spp. must be confirmed with biochemical and serological procedures.<sup>2,3</sup>

### **Storage**

Store ANSR media in a sealed container at 15 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Keep container tightly closed; protect from moisture.

### **Expiration**

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color.

### **Limitations of the Procedure**

1. Use re-hydrated medium within 6 hours of preparation.
2. Do not autoclave ANSR media or use expired media.
3. Sterile water should be brought to 36°C before use when using ANSR media.
4. The presumptive identification of *Salmonella* spp. must be confirmed by further testing.<sup>2,3</sup>

### **Packaging**

**ANSR for *Salmonella* Enrichment Broth 3B                      Code No. 9817    500 g**

### **References**

1. Edel, W., and E. H. Kampelmacher. 1973. Bull World Hlth. Org. 48:167-174
2. **US Food and Drug Administration (November, 2011).** Chapter 5. *Salmonella* in *Bacteriological Analytical Manual*: Retrieved from <http://www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalManualBAM/ucm070149.Htm>
3. **United States Department of Agriculture Food Safety Inspection Service. (January, 2011).** Isolation and identification of *Salmonella* from meat, poultry, pasteurized egg and catfish products in *Microbiology Laboratory Guidebook* (4.05): Retrieved from [http://www.fsis.usda.gov/PDF/MLG\\_4\\_05.pdf](http://www.fsis.usda.gov/PDF/MLG_4_05.pdf)

### **Technical Information**

Contact Neogen Corporation for Technical Service at (800)234-5333, (517)372-9200 or fax us at (517)372-2006.