
SALMONELLA ENRICHMENT

ENRICHMENT FOR *SALMONELLA*

1 INTENDED USE

Salmonella Enrichment is a special formulation of Buffered Peptone Water that has been created and controlled for optimal detection of *Salmonella* in food products and feed.

Salmonella Enrichment with Tween® 80 is used as enrichment medium for *Salmonella* analysis of products whose fat content exceeds 20%.

The **Salmonella Enrichment** line complies with NF EN ISO 6579-1 standard, Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* - Part 1 : detection of *Salmonella* spp., NF EN ISO 6887-1 Microbiology of food - General rules for the preparation of the initial suspension and decimal dilutions, Parts 2, 3, 4, & 5. **Salmonella Enrichment** can be used as Buffered Peptone Water in required methods but the inverse does not apply.

Salmonella Enrichment has been specially formulated for the validated methods **IRIS Salmonella®** and **SESAME Salmonella TEST®**.

2 PRINCIPLES

The peptide composition and osmotic balance of **Salmonella Enrichment** medium have been optimized to allow an exceptional resuscitation level of *Salmonella* strains.

3 TYPICAL COMPOSITION

The composition can be adjusted in order to obtain optimal performance.

The **Salmonella Enrichment** formulation conforms to that of Buffered Peptone Water.

For 1 liter of *Salmonella* Enrichment :

- Peptone	10,0 g
- Sodium chloride	5,0 g
- Disodium phosphate, anhydrous	3,56 g
- Monopotassium phosphate	1,5 g

pH if the ready-to-use media at 25 °C : 7,0 ± 0,2.

For 1 liter of **Salmonella Enrichment + Tween® 80** :

- Peptone	10,0 g
- Sodium chloride	5,0 g
- Disodium phosphate, anhydrous	3,56 g
- Monopotassium phosphate	1,5 g
- Tween® 80	10,0 g

pH of the ready-to-use media at 25 °C : 7,0 ± 0,2.

4 PREPARATION

- Dissolve 20,0 g of dehydrated media (BK194) in 1 liter of distilled or demineralized water.
- Stir slowly until complete dissolution.
- Dispense into tubes or vials.
- Sterilize in an autoclave at 121 °C for 15 minutes.
- Cool to room temperature.

✓ **Reconstitution :**
20,0 g/L

✓ **Sterilization :**
15 min at 121 °C

5 INSTRUCTIONS FOR USE

- Introduce aseptically **25 g** of the sample to be tested into **225 mL** ready-to-use **Salmonella Enrichment** in order to achieve a 1:10 dilution.
- or
- Introduce aseptically **X g** of the sample to be tested into **9 X mL** ready-to-use **Salmonella Enrichment** in order to respect the 1:10 dilution ratio of 1 part sample + 9 parts of diluent mL.
- Mix well.
- Incubate at temperatures and for the periods required by the analytical protocol chosen.

6 QUALITY CONTROL

Dehydrated media : cream-white powder, free-flowing and homogeneous.

Prepared media : amber solution, limpid, may present a slight precipitate after prolonged storage.

Typical culture response (NF EN ISO 11133 – NF EN ISO 6579-1):

Microorganisms		Growth
(1) <i>Salmonella</i> Typhimurium	WDCM 00031	Positive, score 2
(1) <i>Salmonella</i> Enteritidis	WDCM 00030	Positive, score 2
(1) <i>Escherichia coli</i>	WDCM 00012	Positive, score 2
(1) <i>Cronobacter sakazakii</i>	WDCM 00214	Positive, score 2
(2) <i>Escherichia coli</i>	WDCM 00012	± 30 % colonies / T ₀
(2) <i>Staphylococcus aureus</i>	WDCM 00034	± 30 % colonies / T ₀

(1) After 18 hours of incubation at 37 °C (inoculum ≤ 10² microorganisms)

(2) After 45-60 minutes of incubation at 18-27 °C

7 STORAGE / SHELF LIFE

Dehydrated media : 2-30 °C.

Ready-to-use media in vials or flexible bags : 2-25 °C.

The expiration dates are indicated on the labels.

Prepared media in vials or tubes (*) : 180 days at 2-25 °C.

(*) Benchmark value determined under standard preparation conditions, following manufacturer's instructions.

8 PACKAGING

- **Salmonella Enrichment :**

Dehydrated media :

500 g bottle..... BK194HA

5 kg drum BK194GC

Ready-to-use media :

10 x 225 mL vials BM13608

3 x 3 L flexible bags BM13708

2 x 5 L flexible bags BM14408

40 x 5 L flexible bags BM23708

- *Salmonella* Enrichment + Tween® 80 :

Ready-to-use media :

3 x 3 L flexible bags.....	BM16308
2 x 5 L flexible bags.....	BM19808

9 BIBLIOGRAPHY

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NF U 47-100. Juillet 2007. Méthodes d'analyse en santé animale. Recherche par l'isolement et identification de tout sérovar ou de sérovar(s) spécifié(s) de salmonelles dans l'environnement des productions animales.

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NF U 47-102. Janvier 2008. Méthodes d'analyse en santé animale. Isolement et identification de tout sérovar ou de sérovar(s) spécifié(s) de salmonelles chez les mammifères.

10 ADDITIONAL INFORMATION

IRIS *Salmonella*®, COMPASS® and SESAME *Salmonella* TEST® are registered trademarks of SOLABIA S.A.S

The information provided on the labels take precedence over the formulations or instructions described in this document and are susceptible to modification at any time, without warning.

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