



## LAB202

### MKTTn

#### Mueller-Kauffmann Tetrathionate novobiocin Broth

#### Description

A selective enrichment medium for the isolation of salmonellae from food and animal feeds. This product conforms to BS EN ISO 6579:2002. The recent addition of novobiocin is to inhibit the growth of *Proteus* spp.

#### Formulation

	g/litre
Meat Extract	4.3
Enzymatic digest of casein	8.6
Sodium chloride	2.6
Calcium carbonate	38.7
Sodium thiosulphate (anhydrous)*	30.45
Ox bile	4.78
Brilliant green 0.0096	0.0096

\*Equivalent to 47.8g of sodium thiosulphate pentahydrate.

**Grams per litre** **89.4**

#### Appearance

Powder: fine, free-flowing, homogeneous, buff

Finished medium: Green turbid solution that precipitates on standing

**pH:**  $8.2 \pm 0.2$  (base medium)

#### Hazard classification

NR – Not regulated

#### Method for reconstitution

Weigh 89.4 grams of powder and disperse in 1 litre of deionised water. Allow to soak for 10 minutes, swirl to mix and bring to the boil. Cool to below 45°C, prior to use add 20 ml of iodine-iodide solution and 4 vials of X150 Novobiocin. Mix well and distribute into sterile containers.

#### Iodine-iodide solution

Dissolve 25g of potassium iodide in 10 ml of water. Add 20g iodine and dilute to 100ml with sterile deionised water.

#### Storage

Dehydrated culture media: 10-25°C

Base medium (without supplements): 2 weeks at 10-25°C

Complete medium: use on day of preparation

#### Inoculation and Incubation

Following pre-enrichment in non-selective liquid media (see ISO 6579:2002), transfer 1ml of the broth to 10ml of MKTTn and 0.1ml to 10ml of RVS broth (LAB086). Incubate LAB202 MKTTn at  $37^{\circ}\text{C} \pm 1^{\circ}\text{C}$  for  $24\text{h} \pm 3\text{h}$  and LAB086 RVS broth at  $41.5 \pm 1^{\circ}\text{C}$ , for  $24\text{h} \pm 3\text{h}$ . Subculture these selective broths onto XLD agar (LAB032) and a second isolation medium of your choice and incubate for  $24\text{h} \pm 3\text{h}$ . Salmonella should be confirmed by appropriate biochemical and serological techniques.



**Minimum Q.C. organisms** (according to CEN ISO/TS 11133-2:2003)

*Salmonella* Typhimurium ATCC 14028 or *Salmonella* Enteritidis ATCC 13076

*Escherichia coli* ATCC 25922 or ATCC 8739

#### **References**

BS EN ISO 6579:2002 Microbiology of food and animal feeding stuffs – Horizontal method for the detection of *Salmonella* spp.

ISO/TS 11133-2:2003 Microbiology of food and animal feeding stuffs – Guidelines on preparation and production of culture media – Part 2: Practical guidelines on performance testing of culture media.