

## Product Information

### TETRATHIONATE BROTH BASE, HAJNA

Product Number **T1938**

#### Product Description

Tetrathionate Broth Base, Hajna is used as an enrichment broth for the isolation of *Salmonellae*. Peptone, special and yeast extract provide nitrogenous compounds and vitamin B complex. Sodium deoxycholate and brilliant green inhibit gram-positive bacteria. Dextrose and mannitol are fermentable carbohydrates which help in differentiation of the enteric pathogens especially the *Salmonella* group. The iodine-iodide solution makes the tetrathionate in the medium which inhibits normal intestinal flora.

#### Components

Item	g/L
Peptone, Special	18.00
Yeast Extract	2.00
Sodium Chloride	5.00
D-Mannitol	2.50
Dextrose	0.50
Sodium Deoxycholate	0.50
Sodium Thiosulfate	38.00
Calcium Carbonate	25.00
Brilliant Green	0.01

Final pH (at 25 °C) 7.6 ± 0.2

#### Precautions and Disclaimer

For laboratory use only. Not for drug, household or other uses.

#### Preparation Instructions

Suspend 91.5 grams of Tetrathionate Broth Base, Hajna in 1000 mls of distilled water. Heat to boiling to dissolve the medium completely or place in flowing steam for 30 minutes. Do Not Autoclave. Cool to 45 °C.

Mix and add 40 mls of an iodine solution. [8g of (P 2963 potassium iodide and 5 g of (I 3380) iodine per 40 mls.) Mix and dispense 10 mls in tubes. Do not heat after the addition of iodine.

#### Storage

Store the dehydrated medium at 24 °C and the prepared medium at 2-8 °C.

#### Product Profile

Appearance	Cream colored, homogenous, free flowing powder.
Color and Clarity	Light green colored, opalescent solution with heavy white precipitate.
Cultural Response	Cultural characteristics are observed after 18-24 hours at 35-37 °C.

Organisms	(ATCC)	Recovery	Color of colony on MacConkey Agar
-----------	--------	----------	-----------------------------------

<i>Salmonella typhimurium</i>	(14028)	good-excellent	colorless
<i>Salmonella arizoae</i>	(13314)	good-excellent	colorless
<i>Shigella dysenteriae</i>	(13313)	good-excellent	colorless
<i>Escherichia coli</i>	(25922)	fair to good	pink

#### References

- Mueller, L., (1923). C.R. Soc. Biol. 89, 434. Kauffman, F., (1930).
- Zentralb. Bakteriologie. Parasitenkd. Infektionskr.-Hyg. Abt. I. Orig. 113, 148.
- Knox, R., et al., (1942). J. Pathol. Bacteriol. 54, 469.
- MacFaddin, J., (1985). Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria. Vol. 1. Williams and Wilkins. Baltimore, Maryland.
- American Type Culture Collection, Manassas, Va., U.S.A.

T1938 6/99

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.