

MM0207

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Use and description: For the isolation and cultivation of Gram-negative enteric microorganisms (*Salmonella* and *Shigella*) from clinical specimens. Salicin, sucrose and lactose fermenting bacteria appear as yellow to orange colonies. H₂S producing organisms appear as colonies with black centers because of the presence of ferric citrate which forms iron sulphide. Bile salts inhibits most of Gram positive bacteria. Non fermenting *Salmonella* and *Shigella* colonies are blue green. The additional carbohydrate (sucrose) and salicin with the high concentration of peptones give better growth of *Salmonella* and *Shigella* spp.

Composition per liter:

Peptones.....	12.000g
Yeast extract.....	3.000g
Sodium chloride.....	5.000g
Agar.....	14.000g
Lactose.....	12.000g
Sucrose	10.000g
Bile salt no. 3.....	2.000g
Sodium thiosulphate.....	5.000g
Salicin.....	2.000g
Ferric ammonium citrate.....	1.500g
Acid fuchsin.....	0.100g
Bromthymol blue.....	0.064g

Final pH of the ready to use medium: 7.5 ± 0.2

Medium preparation: Add 69.04 grams of dehydrated culture medium to 1 liter of distilled water. Heat with repeated stirring and boil for one minute to dissolve completely. DO NOT AUTOCLAVE OR OVERHEAT THIS MEDIUM. Pour plates can be prepared after the medium has cooled to 45-50°C.

Quality specifications: Dehydrated medium: homogeneous, light greenish-beige fine powder. Ready to use medium: clear to trace hazy and light to dark green in color.

Microbiological response:

Organism	Result
<i>Enterobacter aerogenes</i> ATCC 13048	Growth/yellow to salmon colored colonies with bile precipitate
<i>Escherichia coli</i> ATCC 25922	Inhibited/yellow-orange bile
<i>Proteus vulgaris</i> ATCC 13315	Inhibited/clear to yellowish
<i>Salmonella typhimurium</i> ATCC 14028	Growth/green black centers
<i>Shigella flexneri</i> ATCC 12022	Growth/blue-green colonies

Storage: Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or the color has changed from the original.