

Use and description:

Tergitol 7 Agar is a selective and differential medium for identification and enumeration of *Escherichia coli* and other coliforms in water. The principle of the medium relies on the ability of *E. coli* and other coliforms to ferment lactose with the production of acid which is seen by a change of colour of the pH indicator bromothymolblue. Tergitol 7 inhibits Gram-positive organisms and minimises the swarming of *Proteus* allowing better recovery of coliforms. TTC is rapidly reduced to insoluble red formazan.

Composition per liter:

Peptone.....	10.00 g
Yeast extract.....	6.00 g
Meat extract.....	5.00 g
Agar.....	13.00 g
Lactose.....	20.00 g
Bromothymolblue.....	0.05 g
Tergitol 7.....	0.10 g

Final pH of the ready to use medium: 7.2 ± 0.2

Medium preparation:

Dissolve 53.9 grams of dehydrated culture medium in 1 liter distilled water. Wait 5 minutes, then mix thoroughly until a homogenous suspension is obtained. Heat with repeated stirring and bring to boiling point until completely dissolved. Dispense in 100 ml volumes and sterilise at 121°C for 15 minutes. Cool to 50°C and add 5 ml of 0.05% T.T.C.. Mix well and pour in Petri dishes.

Quality specification:

Dehydrated medium: homogeneous, fine, beige powder.

Ready to use medium: clear greenish.

Microbiological response:

Organism	Result growth / lactose / TTC
<i>Escherichia coli</i> ATCC 25922	+ / + / -
<i>Shigella flexneri</i> ATCC 12022	+ / - / +
<i>Staphylococcus aureus</i> ATCC 25923	- / - / -

Storage:

Dehydrated medium should be stored between 5 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.