

56156 M-17 Broth

Liquide selective medium for *Streptococcus thermophilus* in the common examination of yoghurt. Also used for the enrichment of *Streptococcus thermophilus* in the dairy industrie.

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Ingredients	Grams/Litre
Tryptone	2.5
Meat peptone	2.5
Soya peptone (papainic)	5.0
Yeast extract	2.5
Meat extract	5.0
Sodium glycerophosphate	19.0
Magnesium sulfate	0.25
Ascorbic acid	0.5
Lactose	5.0
Final pH 7.0 +/- 0.2 at 25°C	

Store prepared media below 8°C protected from direct light and dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions:

Suspend 42 g of powder in 1 litre of distilled water and let it soak. Heat to boiling and dispense into suitable containers. Sterilize by autoclaving at 121°C for 15 minutes.

Principle and Interpretation:

Tryptone, meat peptone, soya peptone, yeast extract and meat extract provide carbonaceous, nitrogenous compounds, vitamin B complex and other essential growth factors. Lactose is the fermentable carbohydrate and ascorbic acid is stimulatory for the growth of lactic *Streptococci*. Magnesium sulphate provides essential ions to the organisms. Sodium glycerophosphate increases the buffering capacity of the medium, this promotes the growth of lactic streptococci and inhibits lactobacilli growth.

Cultural characteristics after 24-48 hours at 35°C.

Organisms (ATCC)	Growth
<i>Streptococcus agalactiae</i> (13813)	+++
<i>Streptococcus thermophilus</i> (14486)	+++
<i>Lactococcus lactis</i> spp. <i>cremoris</i> (19257)	+++
<i>Lactococcus lactis</i> spp. <i>lactis</i> (19435)	+++
<i>Enterococcus faecalis</i> (11700)	+++
<i>Escherichia coli</i> (25922)	+++
<i>Staphylococcus aureus</i> (25923)	+++
<i>Lactobacillus acidophilus</i> (4356)	++
<i>Lactobacillus casei</i> (393)	+
<i>Lactobacillus fermentum</i> (9338)	+/-



References:

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