

17168 Milk Agar, modified according to Brown & Scott

For the confirmation of *Pseudomonas aeruginosa* in swimming pool waters.

Composition (in prepared medium):

Ingredients	Grams/Litre
Part A (Cat. No. 22287): Instant Non-Fat Milk	100.0
Part B (Cat. No. 28208): Peptic digest of animal tissue	5.0
Sodium chloride	5.0
Bile salts mixture	1.5
Yeast extract	1.5
Agar	15.0

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

Directions:

Part A: Suspend 100 g in 500 ml distilled water. Sterilize by autoclaving at 121°C for 5 minutes. Cool to 55°C. Part B: Suspend 28 g in 500 ml distilled water and sterilize by autoclaving at 121°C for 15 minutes. Cool rapidly to 55°C. Mix Part A and Part B together and pour into sterile petri plates.

Principle and Interpretation:

Swimming pool water is generally chlorinated drinking water, but it can also be from thermal springs or salt water. Microorganisms of concern are typically those from the body of the bather's including the orifices. *Pseudomonas aeruginosa* is one of the major supporting indicator organisms in the swimming pool. This organism is mainly responsible for ear and eye infection and is very likely to get disseminated in the swimming pool water due to constant contact of ears and eyes with the water. Milk, peptic digest of animal tissue, yeast extract provide carbon, nitrogen, minerals, vitamins, trace ingredients and other essential growth nutrients for the multiplication of *Pseudomonas aeruginosa*. Bile salts mixture inhibits gram-positive organisms. Sodium chloride ensures osmotic balance. *Pseudomonas aeruginosa* forms yellowish green colonies on this medium.

Cultural characteristics after 24 hours at 35°C.

Organisms (ATCC)	Growth	Pigment production
<i>Pseudomonas aeruginosa</i> (27853)	+++	Yellowish green
<i>Escherichia coli</i> (25922)	+++	-

References:

1. M.R.W. Brown, F.J.H. Scott, J. Clin. Pathol., 23, 172 (1970)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

