

## Product Information

### 17169 Milk-Agar with Cetrimide

For detection and enumeration of *Pseudomonas aeruginosa* in water. It is recommended by ISO Committee under the specification ISO 8360-1:1988.

#### Composition (in prepared medium):

Ingredients	Grams/Litre
Part A (Cat. No. 29203): Skim Milk powder	133.3
Part B (Cat. No. 29202): Peptic digest of animal tissue	3.33
Sodium chloride	1.67
Yeast extract	1.0
Cetrimide	0.4
Agar	20

Final pH (at 25 °C) 7.3 ± 0.2

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 :

Suspend 26.4 g of Part B (Cat. No. 29202) in 250 ml of distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 121°C for 20 minutes. Suspend 133 g of Part A (Cat. No. 29203) in 750 ml of distilled water and sterilize by autoclaving at 121°C for 5 minutes. After autoclaving mix Part A and B and pour into sterile petri plates.

#### Principle and Interpretation:

Milk-Agar with Cetrimide is formulated as recommended by ISO Committee (1) which has different formulation than the Milk Agar recommended by APHA (2). Strains of *Pseudomonas aeruginosa* are identified by their pigment, i.e. pyocyanin production. *Pseudomonas aeruginosa* is the only species of *Pseudomonas* or gram-negative rod known to excrete pyocyanin. *Pseudomonas aeruginosa* hydrolyses casein and produces a yellow to green diffusible pigment. Peptic digest of animal tissue, yeast extract and skim milk provide nitrogen, sulphur, vitamins and other growth nutrients. Sodium chloride maintains osmotic equilibrium. Cetrimide (Cetyl trimethylammonium bromide Cat. No. 52365) is a quaternary ammonium compound which inhibits a wide variety of microorganisms including *Pseudomonas* species other than *Pseudomonas aeruginosa*.

Cultural characteristics after 24 hours (48 hours if necessary) at 35 to 37°C.

Organisms (ATCC)	Colour of Colony	Growth
<i>Pseudomonas aeruginosa</i> (27853)	blue green	good-luxuriant
<i>Pseudomonas maltophilia</i> (13637)	-	inhibited
<i>Escherichia coli</i> (25922)	-	inhibited

#### References:

- International Organisation for Standardisation (ISO) 1988, Draft ISO/DIS 8360-1.
- Greenberg A. E., Clesceri L. S. and Eaton A. O. (Eds.), 1992, Standard Methods for the Examination of Water and Wastewater. 18th ed., APHA, Washington, DC.