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Product Information

15997 Brewer Agar (Anaerobic Agar acc. to Brewer)

For the culture of *Clostridium* species or other anaerobic and microaerophilic microorganisms in surface culture according to Brewer.

Composition:

Ingredients	Grams/Litre
Casein peptone	10.0
Soy peptone	5.0
Yeast extract	5.0
L-Cystine	0.4
D(+)-Glucose	10.0
Sodium chloride	5.0
Sodium thioglycolate	2.0
Sodium formaldehyde sulfoxylate	1.0
Methylene blue	0.002
Agar	12.6
Final pH 7.2 +/- 0.2 at 25°C	

Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions:
Dissolve 51 g in 1 litre distilled water and autoclave at 121°C for 15 minutes. Pour plates with thick layers.

Principle and Interpretation:
It is recommended for best results, use first porous tops on the plates during solidification to obtain a dry surface. After inoculation, change to a Brewer anaerobic petri plate cover. The sealing ring inside the cover should make a perfect contact with the medium and should not be broken before the end of the incubation period. The medium contains some reducing agents (thioglycollate, formaldehyde sulfoxylate, cystine) which ensure adequate anaerobiosis. Methylene blue operates as a redox indicator, the decolouration indicates anaerobiosis. This contidions allowes a surface growth of anaerobs and microaerophiles without the use of anaerobic jar.
Casein peptone, Soy peptone and Yeast Extract provide the nitrogen, Vitamins and amino acids. Dextrose is the carbon source, and Sodium Chloride maintains osmotic equilibrium.

Cultural characteristics after 48 hours at 35ºC.

Organisms (ATCC)	Growth
Clostridium tetani (19406)	+
Clostridium botulinum (25765)	+++
Clostridium perfringens (10543)	+++
Clostridium putrificum (25784)	+++
Clostridium septicum (12464)	+++
Clostridium novyi (1795)	+++
Staphylococcus aureus (25923)	++
Escherichia coli (25922)	+++

References:
1. E. Aubertin,E. Aubel, L. Genevois, A propos de Ia culture des anaérobies strict en milieu, aérobie, Compt. rend. Soc. Biol. (Paris), 98, 957 (1928).
2. J. H. Quastel, M. Stephenson, Experiments on “strict“ anaerobes: 1. The relationship of B. sporogenes to oxygen, Biochem. J., 20, 1125 (1926)
3. J.H. Brewer, Clear liquid medium for the ,,aerobic“ cultivation of anaerobes, J. Amer. Med. Assoc. 115, 598 (1940)
4. J.H. Brewer, A new Petri dish and technique for use in the cultivation of anaerobes and microaerophiles, Science, 95, 587 (1942)

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.