

GAM (Gifu Anaerobic Medium) Semi-Solid



Medium used for the detection and enumeration of anaerobic bacteria.

*Equally use with MFDS (MB-G2160K).

• CONTENTS (Liter)

Peptone	10.0 g
Soytone	3.0 g
Proteose Peptone	10.0 g
Bovine Serum Albumin	13.5 g
Yeast Extract	5.0 g
Beef Extract	2.2 g
Monopotassium Phosphate	2.5 g
Liver Extract	1.2 g
Sodium Chloride	3.0 g
L-Cysteine	0.3 g
Sodium Thioglycollate	0.3 g
Agar	1.5 g

Final pH = 7.1 ± 0.2 at 25°C .

• PROCEDURE

Suspend 52.5 G of powder in 1 L of distilled or deionized water. If necessary, add 1% sugar (glucose, lactose, inositol or raffinose). Heat to boiling until completely dissolved. Sterilize by autoclave at 115°C for 15 minutes. Cool to $45\text{--}50^{\circ}\text{C}$ in water bath. Mix well. Dispense in tubes (or after sterilization, dispense in tubes).

• INTERPRETATION

GAM (Gifu Anaerobic Medium) Semi-Solid is a medium used for the detection and enumeration of anaerobic bacteria. It is suitable for tests of various biochemical properties, motility, carbohydrate utilization and preservation of anaerobes. Peptone, soytone, proteose peptone, yeast extract, beef extract and liver extract provide nitrogen, carbon and vitamin sources. Bovine serum albumin is used as stabilizers for other solubilized proteins. Monopotassium phosphate is a buffering agent. L-Cysteine and sodium thioglycollate are the reducing agents added in the medium to provide adequate anaerobiosis. Sodium chloride supplies essential electrolytes for transport and maintains the osmotic balance. Agar is the solidifying agent.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at $35 \pm 2^{\circ}\text{C}$ for 48 – 72 hours under anaerobic condition. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance : slightly opalescent.

Color: light amber.

Incubation conditions: $35 \pm 2^{\circ}\text{C}$ / 48 – 72 hours / anaerobic condition

Microorganism	ATCC	Growth	Motility	Gas
<i>Clostridium perfringens</i>	13124	good	-	+
<i>Clostridium sporogenes</i>	11437	good	+	+

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Collee J.G., Fraser A.G., Marminon B.P., Simmons A.,)(Eds), 1996, Mackie and McCartney. Practical Medical Microbiology, 14th Ed., Churchill Livingstone.
2. Isenberg (Ed.) 1992, Clinical Microbiology Procedures Handbook, American Society for Microbiology, Washington, D.C.
3. Refer to the MFDS and QIA.

• PACKAGE

Cat. No : MB-G2160 GAM (Gifu Anaerobic Medium) Semi-Solid	500 G
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