

Orange Serum Agar



Medium used for the cultivation and enumeration of aciduric microorganisms associated with the spoilage citrus products.

• CONTENTS (Liter)

Orange Serum	10.0 g
Yeast Extract	3.0 g
Pancreatic Digest of Casein	10.0 g
Dextrose	4.0 g
Dipotassium Phosphate	2.5 g
Agar	15.5 g
Final pH = 5.5 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 45.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. AVOID OVERHEATING. Cool to 45-50°C in water bath. Mix well. Dispense in petri dishes.

• INTERPRETATION

Orange Serum Agar is a medium used for the cultivation and enumeration of aciduric microorganisms associated with the spoilage citrus products. Orange serum provides an optimal environment for the recovery of acid tolerant microorganisms from citrus products. Pancreatic digest of casein provides carbon, nitrogen, vitamins and minerals. Yeast extract supplies B-complex vitamins which is required for bacterial growth. Dextrose is a source of carbohydrate. Dipotassium phosphate is the buffering agents. 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 ± 2°C for 40 - 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light tan.

Prepared medium

Appearance: slightly opaque.

Color: light tan to medium amber.

Incubation conditions: 35 ± 2°C / 40 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth
<i>Lactobacillus delbrueckii</i>	11842	50-100	good
<i>Lactobacillus fermentum</i>	9338	50-100	good
<i>Lactobacillus plantarum</i>	8014	50-100	good
<i>Candida albicans</i>	10231	50-100	good
<i>Saccharomyces cerevisiae</i>	76625	50-100	good
<i>Aspergillus niger</i>	16404	50-100	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 or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Vanderzant, C., and D.F. Splittstoesser (ed.). (1992). Compendium of methods for the microbiological examination of foods, 3rd ed. American Public Health Association, Washington, D.C.
2. MacFaddin, J.F. (1985). Media for isolation-cultivation-identification maintenance of medical bacteria, vol. 1. Williams & Wilkins, Baltimore, MD.

• PACKAGE

Cat. No : MB-O1078 Orange Serum Agar	500 G
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