

ORANGE SERUM AGAR

A selective medium for the cultivation and enumeration of micro-organisms in citrus juice concentrates.

Dehydrated media	
Code number:	500 g: OSA20400, 5 kg: OSA24000
Packaging of 400 g:	400 g agar base + 4 x 500 ml sterile, filtered, pH adjusted orange juice
Packaging of 4 kg:	4 kg agar base + 40 x 500 ml sterile, filtered, pH adjusted orange juice
Appearance of agar base:	Yellowish, homogeneous hygroscopic powder
Appearance of orange juice:	Orange coloured liquid
pH before autoclaving (25 °C):	5,3 – 5,7

Direction for pH 5,5: Suspend **20 g agar base** in 400 ml of distilled water. Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly to 50 – 60 °C and add aseptically **100 ml of orange juice**. Mix well before pouring.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

For sufficient accuracy it is enough to apply the 100 ml scale on the bottle of the orange juice.

Direction for pH 3,5: Suspend **20 g agar base** and **5 g Bacteriological Agar (BAA10100)** in 400 ml of distilled water. Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly to 50 – 60 °C and add aseptically **100 ml of orange juice**. Cool to 50 °C and add aseptically **1 vial of Citric Acid Solution (CIS80005)**. Mix well and pour immediately.

Warning!

- For sufficient accuracy it is enough to apply the 100 ml scale on the bottle of the orange juice.
- The low pH decreases the gel strength of the medium quickly, therefore it is extremely important to cool it promptly and pour immediately. For the same reason, once acidified with citric acid, the medium should not be reheated.

Prepared media	
Bottled media:	100 ml: OSA30100, 500 ml: OSA30500
Plated media:	55 mm: OSA50055, 90 mm: OSA50090
Colour:	Orange
pH (25 °C):	5,4 – 5,6

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes (in case of pH 5,5). If adjustment of pH is necessary to pH 3,5 complete according to the direction of the dehydrated media. Media in Petri-dishes are ready to use.

FORMULA FOR ONE LITRE OF COMPLETE MEDIUM

Peptones	18 g
Glucose	4 g
Orange juice	200 ml
Buffers	3 g
Agar	15 g

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature. Store the bottled media protected from light at room temperature. Store the orange juice and the plated media protected from light at 2-8 °C. Use before the expiry date on the label.

Quality control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 72 h
<i>Lactobacillus acidophilus</i>	ATCC 4356	Good (under micro-aerobic conditions)	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	

References: APHA (2001) Compendium of Methods for Microbiological Examination of Foods, 4th ed.

In vitro diagnostic – for professional use only!