



Orangeserum-Agar pH 3.4

Version: 07/2022
M&S item numbers: 4097 (21 x 20 ml)
Profile: Glass tubes and polycarbonate bottles
Color: Brownish
Storage: Dark and dry at 4 – 12 °C
Shelf life: 8 months after production

Description and application range

Orangeserum-Agar is used for the detection and colony count of acidophilic and acidotolerant microorganisms like yeasts, molds, acetic and lactic acid bacteria in fruit juices, soft drinks and other beverages. Casein peptone and yeast extract provide all basic components for the development of microorganisms. Dextrose serves as carbon source. The low pH – value supports the growth of acidophilic and acid tolerant microorganisms and at the same time slightly inhibits the growth of accompanying bacteria. The addition of orangeserum enhances the development of beverage spoiling microorganisms i.e. in citrus fruit based beverages. The medium is manufactured and quality tested in compliance with ISO 11133:2014 + Amd. 2:2020 standard.

Typical composition

Enzymatic digest of casein	10.0 g/l
Yeast extract	3.0 g/l
Glucose	4.0 g/l
Di-Potassium hydrogen phosphate	3.0 g/l
Orange serum concentrate	20.0 g/l
Bacteriological Agar	17.0 g/l

Final pH: 3.4 ± 0.2 at 25 °C

Microbiological quality control

Bacterial contamination

Incubation: aerobically at room temperature for 3 days, specification: no growth

Productivity quantitative analysis

Incubation: aerobically/microaerophilic at 25 ± 1 °C for 48 ± 3 h, approx. inoculum: 50 – 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Saccharomyces cerevisiae</i>	WDCM 00058	$P_R \geq 0.7$	White colonies
<i>Zygosaccharomyces rouxii</i>	DSM 7525	Growth	Beige colonies
<i>Acetobacter aceti</i>	DSM 2002	Growth	Brownish colonies
<i>Lactobacillus sakei</i>	DSM 20017	Growth	White colonies

P_R productivity rate (recovery rate)