Product: WL Nutrient Agar



Specification

Solid medium for the culture and enumeration of yeast and bacteria for microbiological control in brewing and other fermentation industries.

Presentation				
20 Prepared Plates	Packaging Details	Shelf Life	Storage	
90 mm with: 21 ± 2 ml	1 box with 2 cellophane bags with 10 plates/bag	3 months	2-14 °C	
Composition				

Composition (g/l):	
Yeast extract	4.0000
Tryptone	5.0000
Dextrose	50.0000
Monopotassium phosphate	0.5500
Magnesium sulfate	0.1250
Calcium chloride	0.1250
Potassium chloride	0.4250
Iron (III) chloride	0.0025
Manganese sulfate	0.0025
Bromcresol green	0.0220
Agar	20.0000

Description /Technique

Description:

WL Nutrient Agar was formulated by Green and Gray in the Wallerstein Laboratory for use in the control of industrial fermentations, particularly the processing of beer. It is recommended for examination of worts, beers, liquids containing yeast and other materials. WL Nutrient Agar has a pH of 5,5 which is optimal for the enumeration of brewers yeast .

Technique:

Dilute the sample material and spread 0,1 mL onto a WL Nutrient Agar plate.

The WL Nutrient Agar plate is incubated aerobically to obtain a total count, mainly of yeast colonies. Plates prepared are generally incubated at $25^{\circ}C\pm 1$, if brewing materials are being studied. Incubation may be continued for a 5-7 days, depending upon the microbiota present. Counts can be made at intervals during the incubation period.

Quality control

Physical/Chemical control

Color : Blue greenish pH: 5.5 ± 0.2 at 25°C

Microbiological control

Inoculate:Practical range 100 ± 20 CFU. Min. 50 CFU (Productivity).

Microbiological control according to ISO 11133:2014/A1:2018.

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

30±1°C for 72 ± 3h - 5; in Aerobic o CO2 enrichment according to microorganisms type.

Microorganism

S. cerevisiae ATCC[®] 9763, WDCM 00058 Lactobacillus fermentum ATCC[®] 9338 Escherichia coli ATCC[®] 25922, WDCM 00013

Growth

Good - Green colonies - Yellow medium Good - Green colonies - Yellow medium Good - Green colonies - Yellow medium

Sterility Control

Incubation 48 h at 30-35 °C and 48 h at 20-25 °C: NO GROWTH. Check at 7 days after incubation in same conditions.



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VWR International LLC, Radnor Corporate Center, Building One, Suite 200, 100 Matsonford Road Radnor, PA 19087 VWR International bv - Haasrode Research Park, Zone 2020 - Geldenaaksebaan 464 - BE-3001 Leuven www.vwr.com