

WL Nutrient Agar

Use and description:

WL nutrient agar is used for wide variety of organisms in the brewer industry for controlling the industrial fermentation process as it can differentiate the wild yeast from brewing yeast.

Composition per liter:

Yeast extract.....	4.0000 g
Tryptone	5.0000 g
Glucose.....	50.0000 g
Potassium-di-H-phosphate	0.5500 g
Potassium chloride.....	0.4250 g
Calcium chloride.....	0.1250 g
Magnesium sulphate.....	0.1250 g
Ferric chloride.....	0.0025 g
Manganeses sulphate.....	0.0025 g
Bromocresol green.....	0.0220 g
Agar.....	15.0000 g

Final pH of the ready to use medium: 5.5 ± 0.2

Medium preparation:

Add 75.0 grams of dehydrated culture medium to 1 liter of distilled water. Heat with repeated stirring and boil for one minute to dissolve completely. Autoclave at 121°C for 15 minutes and distribute. If the pH desired to be set at 6.5, adjust it before distributing by 1% sodium bicarbonate solution. For the detection of contaminants bacterial biota 4 mg/l cycloheximide should be added to the medium.

Quality specifications:

Dehydrated medium: homogeneous, light beige fine powder.

Ready to use medium: beige and trace hazy.

Microbiological response after 40-48 hours at 31 °C for yeast and 37 °C for bacteria:

Organism	Result	
	w/o cycloheximide	with cycloheximide
<i>Lactobacillus fermentans</i> ATCC9338	Good growth	growth
<i>E.coli</i> ATCC25922 ATCC 25922	Good growth	growth
<i>Saccharomyces cerevisiae</i> ATCC 9763	Good growth	inhibited

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or the color has changed from the original.