

Brettanomyces Selective Broth

Cat. 2005

For the enrichment of Brettanomyces in wines

Practical information

Applications	Categories
Selective enrichment	Brettanomyces

Industry: Alcoholic beverages / Fermentation

Principles and uses

BRETTANOMYCES SELECTIVE BROTH is a medium used for the enrichment of Brettanomyces of wines.

Brettanomyces is a genus of yeast capable of growing in high concentrations of alcohol and of fermenting sugars that have not been used by *Saccharomyces cerevisiae* during fermentation. The presence of Brettanomyces is associated with the appearance of strange wine aromas.

Brettanomyces is also called Dekkera (name given to species with sexual reproduction and therefore formation of spores by meiosis). Brettanomyces is generally found in red wines in barrels or bulk storage, since acids necessary to form some of the indicative aromas are extracted from grape skins. Brettanomyces contaminations have also been found in Chardonnay and Sauvignon Blanc.

Dextrose is the fermentable carbohydrate providing carbon and energy. Peptone and malt extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is source of vitamins, particularly the B-group. Thiamine is a growth factor. Selective agents are added to improve Brettanomyces recovery through the inhibition of common contaminants as *Saccharomyces cerevisiae*.

Formula in g/L

Dextrose	10	Chloramphenicol	0,1
Cycloheximide	0,1	Gentamicin	0,05
Malt extract	3	Peptone	5
Thiamine	0,01	Yeast extract	3

Preparation

Suspend 21,3 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and boil for 10 minutes. DO NOT AUTOCLAVE.

Instructions for use

- Inoculate and incubate at a temperature of 25-30°C and observed after 7 days.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Amber	5,3 ± 0,2

Microbiological test

Incubation conditions: (25-30 °C / 7 days).

Microorganisms	Specification
Dekkera anomala ATCC 10562	Good growth
Salmonella typhimurium ATCC 14028	Inhibition

Escherichia coli ATCC 25922
Enterococcus faecalis ATCC 29212
Dekkera bruselensis ATCC 36234
Saccharomyces cerevisiae ATCC 9763

Inhibition
Inhibition
Good growth
Inhibition

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

Winemaking update. Brettanomyces /dekkera. Control y detección en bodegas.
Wine Microbiologists practical application and procedure