

NOCIVE BREWERS BACTERIA AGAR BASE, MODIFIED

CAT N°: 1438

Selective medium for the detection of contaminating, spoilage microorganisms in brewery

FORMULA IN g/l

Maltose	15.00	Disodium Phosphate	2.00
Dextrose	15.00	Polisorbate 80	0.50
Potassium Acetate	6.00	L-Malic Acid	0.50
Pancreatic Digest of Casein	5.00	L-Cysteine HCl	0.20
Yeast Extract	5.00	Chlorphenol Red	0.07
Beef Extract	2.00	Bacteriological Agar	15.00

Final pH 5.8 ± 0.2 at 25°C

PREPARATION

Suspend 66.3 grams of medium in 500 ml of distilled water and 500 ml of beer without gas. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C, mix well and dispense into plates. The prepared medium should be stored at 8-15°C. The color is pink-red.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

USES

NOCIVE BREWERS BACTERIA AGAR BASE, MODIFIED is a medium used for beer spoilage bacteria.

This medium contains a wide variety of nutrients including Pancreatic digest of casein, yeast extract, beef extract, dextrose and maltose. These nutrients favour the growth of spoilage microorganisms in beer and other samples. Potassium acetate (instead of sodium acetate) makes the medium less inhibitory for the growth of spoilage bacteria that deteriorate beer and other samples. Polysorbate 80 is incorporated to neutralize phenols, hexachlorophene, formalin. L-Cysteine hydrochloride is the reducing agent. Disodium phosphate act as a buffer system. Bacteriological agar is the solidifying agent.

Incubate at 30-35°C and observe after 4 days. After incubation the isolated acid production colonies, Gram-stained and catalasa test must be carried out. Gram-positive, catalase-negative cocci or rods may tentatively be considered lactic acid bacteria.

MICROBIOLOGICAL TEST

The following results were obtained from type cultures in the performance of the medium after incubation at a temperature of 30-35°C and observed after 4 days.

Microorganisms	Growth	Acid Production
<i>Lactobacillus brevis</i> ATCC 8291	Good	Trace-yellow to yellow
<i>Pediococcus acidilactici</i> ATCC 8042	Good	Trace-yellow to yellow
<i>Pediococcus damnosus</i> ATCC 29358	Good	Trace-yellow to yellow

BIBLIOGRAPHY

Back, 1980 Brauwelt 1562

Dacha, 1981, Brauwelt 1778

STORAGE

Once opened keep powdered medium closed to avoid hydration.



2°C



25°C