Technical Data Sheet

Dextrose Casein-peptone Agar

Ordering number: 1.10860.0500

Medium proposed by WILLIAMS (1936) for the identification and enumeration of Bacillus species, especially of "flat sour" bacteria (TANNER 1944), in foodstuffs.

This medium complies with the recommendations of the NCA (National Canners Association 1954, 1956), and the APHA (1992) for examining foods.

Mode of Action

Bacterial colonies, which metabolize dextrose to form acid, cause the indicator bromocresol purple in their immediate surroundings to change its colour to yellow.

Typical Composition (g/L)

Dextrose Casein-peptone Agar	
Peptone from casein	10.0
D(+)glucose	5.0
Bromocresol purple	0.04
Agar-agar	12.0

**Agar-agar is equivalent to other different terms of agar.

Preparation

Suspend 27 g/litre, autoclave (15 min at 121°C).

pH: 6.8 ± 0.2 at 25°C.

The medium is clear and purple.

Experimental Procedure and Evaluation

The culture medium is usually inoculated by the pour-plate method.

Detection of spores: Add the sample material to the culture medium, heat (30 minutes in free-flowing steam) and pour plates.

Detection of mesophilic bacteria: Incubate up to 72 hours at 35 °C.

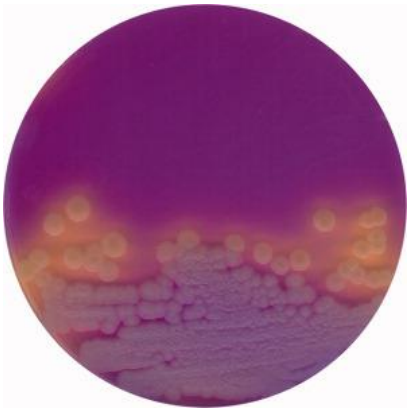
Detection of thermophilic bacteria: Incubate up to 48 hours at 55-60°C.

Typical flat-sour colonies have a smooth edge, a diameter of 2-3 mm with an opaque central spot and are usually surrounded by a yellow zone. Neighbouring colonies which cause alkalinization of the culture medium can mask the yellow colouration.

Quality Control

Control strains	Growth	Colour change to yellow
Staphylococcus aureus ATCC 25923 (WDCM 00034)	Fair to very good	+
Enterococcus faecalis ATCC 11700	Good to very good	+
Bacillus cereus ATCC 11778 (WDCM 00001)	Good to very good	+
Bacillus coagulans ATCC 7050 (WDCM 00002)	Good to very good	+
Escherichia coli ATCC 25922 (WDCM 00013)	Good to very good	+
Alcaligenes faecalis ATCC 19209	Fair to very good	-
Bacillus stearothermophilus ATCC 7953	Good to very good	+

Please refer to the actual batch related Certificate of Analysis.



Bacillus cereus ATCC 11778

Escherichia coli ATCC 25922

Literature

American Public Health Association Inc.: Compendium of Methods for the Microbiological Examination of Foods. - **3rd ed.,** 1992.

National Canners Association: A Laboratory Manual of the Canning Industry. - **1st ed**., Washington 1954.

National Canners Association: Ibid. - **2nd ed**., Washington 1956, 2-9.

TANNER, F.W.: "The Microbiology of Foods." Champaign III., Gerard Press, **2nd ed.** 1944, 693-722; 762-763; 1127-1128.

WILLIAMS, O.B.: Tryptone medium for the detection of flat sour spores. - **Food Research, I (3),** 217-221 (1936).

Ordering Information

Product	Cat. No.	Pack size
Dextrose Casein-peptone Agar	1.10860.0500	500 g

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