

Technical Data Sheet

DEV Lactose Peptone Broth

Ordering number: 1.10690.0500

Enrichment medium for coliforms in the bacteriological analysis of water

Mode of Action

This medium is particularly suited for the enrichment and determination of the titre of coliform bacteria in the bacteriological analysis of water according to the German standard methods for the examination of water and the previous German regulations from 1990.

Typical Composition (g/L)

DEV Lactose Peptone Broth		
Peptone from casein	17.0	
Peptone from soya	3.0	
Lactose	10.0	
Sodium chloride	5.0	
Bromocresol purple	0.02	

Preparation

Suspend 35 g/litre, dispense into test tubes fitted with DURHAM tubes, autoclave (15 min at 121° C).

pH: 7.2 ± 0.2 at 25° C

In some applications, DEV Lactose Peptone broth is prepared double-concentrated. In this case, suspend or 70 g/litre, dispense into test tubes fitted with DURHAM tubes, autoclave (15 min at 121° C). Please note that the pH for double-concentrated can differ from single-concentrated DEV Lactose Peptone broth.

The prepared broth is clear and purple.



Experimental Procedure and Evaluation

This depends on the various methods of water analysis.

Gas in the DURHAM tubes after incubation (24-48 hours at 35 °C aerobically) indicates the presence of E. coli and/or other coliform bacteria.

If lactose-positive microorganisms grow, the broth colour changes to yellow.

Storage

Store at +15 °C to +25 °C, dry and tightly closed. Do not use clumped or discolored medium. Protect from UV light (including sun light). For *in vitro* use only.

Quality Control

Control strains	Growth (Incubation 24 h, 35° C, aerobic)	Colour change to yellow	Gas
Escherichia coli ATCC 25922® (WDCM 00013)	good to very good	+	+
Klebsiella pneumoniae ATCC 13883® (WDCM 00097)	good to very good	+	+
Salmonella typhimurium ATCC 14028® (WDCM 00031)	good to very good	-	-
Aeromonas hydrophila ATCC 7966® (WDCM 00063)	medium to very good	-	-
Enterococcus faecalis ATCC® 11700	medium to very good	+/-	-

Please refer to the actual batch related Certificate of Analysis.

Literature

Deutsche Einheitsverfahren zur Wasser-, Abwasser-, und Schlammuntersuchung. VCH Verlagsgesellschaft, Weinheim, Germany.

Verordnung über Trinkwasser und über Wasser vom 12.Dezember 1990. **Bundesgesetzblatt, Teil I**; 2613-2629 (1990).



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Ordering Information

Product	Cat. No.	Pack size
DEV Lactose Peptone Broth	1.10690.0500	500 g
Fluorocult® DEV Lactose Peptone Broth	1.04037.0500	500 g

Merck KGaA

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