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| OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION | | |
| LAURYL TRYPTOSE BROTH WITH MUG CM0980 | | |

LAURYL TRYPTOSE BROTH WITH MUG

CM0980

Typical Formula*

| | grams per litre |
|--|-----------------|
| Tryptose | 20.0 |
| Lactose | 5.0 |
| Sodium chloride | 5.0 |
| Di-potassium hydrogen phosphate | 2.75 |
| Potassium dihydrogen phosphate | 2.75 |
| Sodium lauryl sulphate | 0.1 |
| 4-methylumbelliferyl-β-D-glucuronide (MUG) | 0.05 |

* adjusted as required to meet performance standards

Directions

Dissolve 35.65g in 1 litre of distilled water. Warm to 40°C. Mix well and distribute into final containers with Durham tubes. Sterilize by autoclaving at 121°C for 15 minutes.

Physical Characteristics

Straw, free-flowing powder
 Colour on reconstitution – straw 1-2
 Moisture level - less than or equal to 7%
 pH - 6.8 ± 0.2 at 25°C
 Clarity - clear (single and double strength broth)

Microbiological Tests Using Optimum Inoculum Dilution

Control Medium: Tryptone Soya Agar

Reactions after incubation at 37°C for 24 ± 2 hours

Medium is challenged with 10-100 colony-forming units

Escherichia coli ATCC®25922 Turbid growth, gas and fluorescence

Medium is challenged with 1E+04 to 1E+06 colony-forming units

Escherichia coli ATCC®11775 Turbid growth, gas and fluorescence
Escherichia coli ATCC®10536 Turbid growth, gas and fluorescence
Escherichia coli ATCC®35218 Turbid growth, gas and fluorescence

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A satisfactory result is represented by visible growth, gas and fluorescence.

Reactions after incubation at 37°C for 48 ± 2 hours


Medium is challenged with 1E+04 to 1E+06 colony-forming units

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|-----------------------------------|-------------|---|
| <i>Citrobacter freundii</i> | ATCC® 8090 | Turbid growth and gas, no fluorescence |
| <i>Enterobacter cloacae</i> | ATCC® 23355 | Turbid growth and gas, no fluorescence |
| <i>Enterobacter aerogenes</i> | ATCC® 13048 | Turbid growth, with or without gas, no fluorescence |
| <i>Klebsiella pneumoniae</i> | ATCC® 13883 | Turbid growth, with or without gas, no fluorescence |
| <i>Pseudomonas aeruginosa</i> | ATCC® 27853 | Turbid growth, no gas or fluorescence |
| <i>Bacillus subtilis</i> | ATCC® 6633 | No growth to slight turbid growth, no gas or fluorescence |
| <i>Staphylococcus aureus</i> | ATCC® 25923 | No growth to slight turbid growth, no gas or fluorescence |
| <i>Staphylococcus epidermidis</i> | ATCC® 14990 | No growth to slight turbid growth, no gas or fluorescence |
| <i>Enterococcus faecalis</i> | ATCC® 19433 | No growth to slight turbid growth, no gas or fluorescence |

A satisfactory result is represented by visible growth with or without gas and no fluorescence, in accordance with the specification. Negative strains are inhibited, with no gas or fluorescence.

After incubation add 1ml of 1M NaOH to each 10ml broth, examine tubes using long wave UV light (365nm). Tubes containing *Escherichia coli* should exhibit a blue fluorescence.

Upon addition of Kovacs' reagent to each tube to assess indole production, *Escherichia coli* ATCC® 25922 shall be indole positive. *Enterobacter aerogenes* ATCC® 13048 shall be indole negative.

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Revision History

| Section / Step | Description of Change | Reason for Change | Reference |
|-----------------|---|-------------------|------------|
| Entire Document | Reformatting to new template Update to test specification | Change control | BT-CC-1744 |
| Entire Document | Correction of typographical/minor errors. Addition of control media + result criteria. | Change control | BT-CC-1924 |