

## SIMMONS CITRATE AGAR

A synthetic differential medium for the differentiation of bacteria on the basis of citrate utilisation according to ISO 10273.

| <b>Dehydrated media</b>        |                                 |
|--------------------------------|---------------------------------|
| Code number:                   | 500 g: CIT20500, 5 kg: CIT25000 |
| Colour:                        | Beige                           |
| Appearance:                    | Homogeneous hygroscopic powder  |
| pH before autoclaving (25 °C): | 6,7 – 7,1                       |

**Direction:** Suspend **24 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position.

| <b>Prepared media:</b> |                                      |
|------------------------|--------------------------------------|
| Bottled media:         | 100 ml: CIT30100 500 ml: CIT30500    |
| Tubed media:           | 100 x 12 mm: CIT40002 (2 ml - slant) |
| Colour:                | Green                                |
| pH (25 °C):            | 6,8 – 7,0                            |

**Direction:** Dispense the melted bottled media aseptically into sterile test tubes. Allow to cool in slanted position. Media in tubes are ready to use.

### FORMULA in g/l

|                               |       |
|-------------------------------|-------|
| Sodium citrate                | 2,00  |
| Sodium chloride               | 5,00  |
| Magnesium sulphate            | 0,20  |
| Bromothymol blue              | 0,08  |
| Potassium phosphate, dibasic  | 1,00  |
| Ammonium phosphate, monobasic | 1,00  |
| Agar                          | 14,70 |

**Note:** The typical formula can be adjusted to obtain optimal performance.

**Storage conditions:** Store the dehydrated media tightly closed in a dry place at room temperature. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2-8 °C. Use before the expiry date on the label.

#### Quality control:

| <b>Test strains</b>          | Incubation temp: 37 °C | <b>Growth</b>                   | Incubation time: 24 h |
|------------------------------|------------------------|---------------------------------|-----------------------|
| <i>Klebsiella pneumoniae</i> | ATCC 13883             | Positive, colour change to blue |                       |
| <i>Escherichia coli</i>      | ATCC 25922             | Negative, without colour change |                       |

**References:** Simmons (1926) J. Infect. Dis. 39: 209.  
ISO 10273:2017

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