Technical Data Sheet

Agar-agar
granulated, purified and free from inhibitors, suitable for microbiology

Ordering number: 101614

Description

A granulated high quality solidifying agent that is essentially free of impurities. It is used as gelling medium for culture media, auxotrophic studies bacterial and yeast transformation studies and bacterial genetics applications.

Mode of Action

Agar-agar is a water-soluble polysaccharide which is obtained by extraction of seaweed. It remains firm at growth temperatures for many microorganisms and is generally resistant to a breakdown by bacterial enzymes.

Preparation

Agar is a gel at room temperature, remaining firm at temperatures as high as 65°C. Agar melts at approximately 85°C, a different temperature from that at which it solidifies, 32-40°C.

Agar-agar is used in a final concentration of 1-1.5% (1.0-1.5g/100ml) for solidifying culture media.
Smaller quantities are used in media for motility studies (0.5% or 0.05g/100ml) and for growth of anaerobes (0.1% or 0.01g/100ml) and microaerophiles. If the culture medium has a pH <5.0 the working strength should be 2% (2g /100ml).

Autoclave a completely dissolved medium at 121°C for 15 min.

Quality Control

Appearance	yellowish white to passes test brownish yellow, odourless granules
Identity (NIR)	passes test
Identity (Iodine - test)	passes test
Identity (Solidification point)	passes test
Identity (Turbidity - test)	passes test
Solidification point	32-36°C
Ca (Calcium)	≤0.5%
Mg (Magnesium)	≤0.1%
Sulfated ash (600°C)	≤6%
Loss on Drying (105°C)	≤12%
Gel strength (1.2%, water)	≥45 g
Suitability for microbiology	passes test

Ordering Information

Product	Cat. No.	Pack content
Agar-agar, granulated, purified and free from inhibitors, suitable for microbiology	1016141000	1 kg

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