Agar-Agar ultra pure, granulated

A granulated, highly pure solidifying agent that is essentially free of impurities

Mode of Action

Agar-agar ultra-pure granulated is an ultra purified agar with a high agar strength, low ash and mineral content that is essentially free of impurities. It is free of toxic pollutants, non agar gums, nitrogenous compounds insoluble salts, thermoducic bacteria and dead bacteria.

Its advantages include excellent clarity, controlled gelation temperature, controlled melting temperature, good diffusion characteristics, absence of toxic bacterial inhibitors and relative absence of metabolically useful minerals and compounds.

It is used for nutritional studies, molecular genetic testing and for antibiotic M.I.C. testing, electrophoresis and diffusion tests. The low ash and mineral content of agar-agar ultra pure limits the interference of agar in antibiotic M.I.C. studies and diffusion tests. A low mineral content prevents the inhibition of the migration of chemotherapeutic acid inantibiotic diffusion test.

Preparation

Agar-agar ultra pure is used in a final concentration of 1-1.5% (10-15g/100ml) for solidifying culture media. Smaller quantities are used in media for motility studies (0.5% or 0.5g/100ml) and for growth of anaerobes (0.1% or 0.1g/100ml) and microaerophiles.

Adjust the pH, if necessary, so that it is 7.0 ± 0.2 at 25°C. Autoclave completely dissolved solution 121°C for 15min.

Typical Analysis

Colour granules	brownish-yellow
Appearance	Free flowing granules
Colour in solution	Light amber
Appearance in solution	Opalacent
pH (5% in water)	5.0-6.0
Loss on drying (Moisture)	≤10%
Sulfated ash	≤5%
Heavy (toxic) metals (as Pb)	0.0005%
Ca	≤0.1%
Mg	≤0.05%
Solidification point	32-36 °C
Melting point	>85 °C
Working strength	1-1.5%

Ordering Information

Product	Merck Cat. No.	Pack size
Agar Agar ultar pure, granulated	1.01613.1000	1 kg

Quality control

Test strains	Growth[1] after 24 hours
Escherichia coli ATCC 25922	+
Strept. pyogenes ATCC 21059	+
Stapyhlococcus aureus ATCC 25923	+
Shigella sonnei ATCC 29930	+
Erysipelothrix rhusiopathiae ATCC 19414	+
Streptococcus agalactiae ATCC 13813	+
Streptococcus equinus DSM 20062	+
Streptococcus pneumoniae ATCC 6301	+
Suitability for microbiology	+

[1] in Standard I Nutrient broth