Agar

Purified agar for bacteriological use and culture media preparation

PHYSIC-CHEMICAL CHARACTERISTIC

Clarity (1.5% w/v)	8.2 NTU
pH at 25°C	6.75 ± 0.75
Gel Strength	650-1000 g/cm^2 maximum
Loss on Drying	12% maximum (9% on average)
Gelation Point	35°C
Melting Point	88°C
Divalent Cations	250 ppm
Heavy Metals (As, Pb)	< 10 mg/kg

DESCRIPTION

Agar is a solidifying agent used for culture media preparation, it is a purified agar from which the extraneous matter, pigmented portions and salts have been removed or reduced to a minimum. It is an hydrosoluble extract from red algae and can be used as a solidifying agent in bacteriological culture media or for determining motility and growth of anaerobes and microaerophiles.

PREPARATION

Agar is typically used in a final concentration of 1-2% for solidifying culture media. Smaller quantities (0.05-0.5%) are used in media for motility studies (0.5%w/v), growth of anaerobes (0.1%) and microaerophiles. 1.5% aqueous solution supplies solid gel at temperature of 35 °C because agar does not melt at temperature lower than 85 °C. The addition of such amounts of agar to liquid media permits all degrees of oxygen tension to exist, thus aids in the development of many fastidious aerobic and anaerobic organisms.

TECHNIQUE

Agar can be used as an ingredient of dehydrated culture media and need dissolution in distilled or deionized water and sterilization by autoclaving.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until sings of deterioration or contamination are evident.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. it is nevertheless recommended to consult the safety data sheet for its correct use.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Hitchens, A.P., and M.C.Leikind (1939) The introduction of agar-agar into bacteriology. J. Bacteriology 37:485-493
2. United States Pharmacopeia Convention (1995) The United States Pharmacopeia 23rd ed. Pharmacopeia Convention, Rockville, MD

PACKAGE

Code	Content	Packaging
611001	500 g	500 g of product in plastic bottle
621001	100 g	100 g of product in plastic bottle
6110015	5000 g	5000 g of product in plastic bottle

pH of THE MEDIUM

6.75 ± 0.75

SHELF LIFE

4 years

QUALITY CONTROL

Dehydrated powder
Appearance: free-flowing, homogeneous
Colour: light beige

TABLE OF SYMBOLS

LOT	Batch code		Consult instructions for use		Manufacturer		Contains sufficient for <n> tests
REF	Catalogue number		Temperature limitation		Use by		Keep away from heat sources

REVISION HISTORY

Revision	Release Date	Change Summary
3	2025-04-18	Corrected typo in the PHYSICAL-CHEMICAL CHARACTERISTIC

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