

Pharmaceutical Agar

Cat. 1816

Gelling agent for culture media.

Practical information

Industry: Culture media ingredients

Principles and uses

Agar is a natural hydrocolloid extracted from several species of red algae, mainly the Gelidium, Gracilaria and Pterocladia types. This is a pharmaceutical quality agar that follows the specifications of the European Pharmacopoeia and American Pharmacopoeia (USP). It is specifically designed for all kind of applications in the pharmaceutical industry for medicinal and cosmetic preparations such as suspensions, reconstituting suspensions, emulsions, sprays, tablets, capsules and creams.

Histology: when dissolved in water, Agar appears granular and somewhat filamentous. A few fragments of the spicules of sponges and a few frustules of diatoms may be present.

Physical-chemical characteristics

Description	Specification
Loss on drying	<=20%
Ash	<=5%
Gel strength (Nikan method at 1,5% at 20°C)	750 - 1000 g/cm2
Melting point (1.5%)	85±5 °C
Particle size	>=95 % 60 mesh
Gelling point (1.5%)	35±3 °C
Color	White to light cream
Arsenic	<=3 ppm
Lead	<=5 ppm
Mercury	<=1 ppm
Cadmium	<=1 ppm
pH (1,5% solution)	6,5-7,5
Turbidity at 1,5% (NTU)	<=35 NTU
Insoluble matter	<1%
Starch/Gelatin	Absence
Acid-insoluble ash	<=0,5%
Water absorption	<=75
EP Identification test ABCD	Passes
USP Identificación test AB	Passes
Colorimetry at 1,5% (420 nm)	<=0,250
Swelling index	>10

Microbiological test

Description	Specification
E. coli	Negative
Salmonella	Negative
Standard plate count	<1.000 CFU/g
Yeast and molds	<100 CFU/g

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C