

Industrial Agar

Gelling agent for culture media.

Cat. 1804

Practical information

Industry: Ingredients for culture media

Principles and uses

Agar is a natural hydrocolloid extracted from several species of red algae, mainly the Gelidium, Gracilaria and Pterocladia types. The marked application increase in the use of agar within the food industry (for example, tin can produce, sweets, pastries, ice creams, etc) is widely spread because of its properties as a dispersing, stabilizing, thickening and gelling agent. It is widely used as a replacement of pectin and being vegetable gelatin of marine origin, it is the perfect substitute for animal gelatin, having ten times more jellification power. Other applications can be in the use of techniques for the micropropagation of plants.

Physical-chemical characteristics

Description	Specification
Ash	<=6,5%
Loss on drying	<=20%
Gel strength (Nikan method at 1,5% at 20°C)	700-1000 g/cm2
Melting point (1.5%)	85-90 °C
Gelling point (1.5%)	34-38 °C
Color	White to light brown
Appearance	Powder
Arsenic	<=3 ppm
Lead	<=5 ppm
Mercury	<=1 ppm
Cadmium	<=1 ppm
Particle size (A.S.T.M) over sieve 60	>95% pass
pH in gel (1,5%)	6,0-7,5
Turbidity at 1,5% (NTU)	<=35
Insoluble matter	<=1,0%
Starch/Gelatin	Absence
Acid-insoluble ash	<=0,5%
Water absorption	<=75 ml
Colorimetry (450 nm)	<=0,3

Microbiological test

Description	Specification
E. coli	Absent
Salmonella	Absent
Total plate count	<5.000 CFU/g
Yeast and moulds	<300 CFU/g

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C