

Industrial Agar

Gelling agent for culture media.

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
Loss on drying	<=8%
Ash	<=5%
Gel strength (Nikan method at 1,5% at 20°C)	<850g/cm2
pH (1.5%) before autoclaving	6,0-7,5
pH (1.5%) after autoclaving	6,0-7,5
Melting point (1.5%)	85 - 90 °C
Gelling point (1.5%)	34 - 38 °C
Particle size (A.S.T.M) over sieve 60	>95 %
Colorimetry (Absorbance 450 nm)	<0,400
Starch/Gelatin	Absence

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C