

Agar Powder

Intended Use

Agar is used as a solidifying agent used in microbiological culture media.

Summary and Principle

Agar is a phycocolloid, water soluble polysaccharide, extracted from a group of red-purple marine algae (Class *Rhodophyceae*) including *Gelidium* and *Gracilaria*. Agar is normally used in final concentration of 1-2% for solidification of culture media. The most important properties of agar are:

1. Good transparency to allow identification of colony type.
2. Consistent gelling (32°C-40°C) and melting (approximately 85°C) temperatures, a property known as hysteresis.
3. Free from toxic substances (bacterial inhibitors).

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Note: TSE/BSE certificate is available on request.

Directions

Refer to the final concentration in the formula of the medium being prepared

Quality Control

Test

Appearance
Solubility
Colour and Clarity of 1% w/v aqueous solution after autoclaving at 15 psi / 15 min
pH after autoclaving
Gelling temperature
Ash Content
Loss on Drying (Moisture Content)
Gel firm Test
Gel melting temperature
Total microbial count
E. coli
Salmonella
Pseudomonas aeruginosa
Staphylococcus aureus
Gel strength (1.5% gel, at 20° C)

Specifications

Cream coloured, free flowing powder
Completely soluble in boiling water
Clear gel

6.5 ± 1.0
30°C - 40°C
Not More Than 10%
Not More Than 10%
Smooth streak line with no cut in agar
85°C - 95°C
Less than 1000 cfu/g
Absent
Absent
Absent
Absent
1000 ± 75 G/cm²

Typical Analysis

Inorganics (%)











Calcium	0.179	Nitrate	< 0.005
Chloride	0.021	Phosphate	< 0.005
Cobalt	<0.001	Potassium	0.121
Copper	< 0.001	Sodium	0.837
Iron	0.002	Sulfate	1.778
Lead	< 0.001	Sulfur	0.841
Magnesium	0.068	Tin	< 0.001
Manganese	< 0.001	Zinc	< 0.001

Reference

1. United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The national formulary 26, Supp. 1, 8-1-08, online. United States Pharmacopeial Convention, Inc., Rockville, Md.
2. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
202010380500	Agar Powder	500 g
202010382500	Agar Powder	2.5 k
202010389925	Agar Powder	25 k (Bag)
202010389825	Agar Powder	25 k (Drum)

 Temperature Limit	 Manufacturer	 Lot Number	 Hygroscopic keep container tightly closed	 Date of Manufacture	 Catalogue Number	 Consult Instructions for use	 Use-by Date	 Received on	 Opened on
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Revision: 1025/VER-03

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
