

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	Specifications
Appearance	Cream coloured, free flowing powder
Solubility	Completely soluble in boiling water
Colour and Clarity of 1% w/v aqueous solution after autoclaving at 15 psi / 15 min	Clear gel
pH after autoclaving	6.5 ± 1.0
Gelling temperature	30°C - 40°C
Ash Content	Not More Than 10%
Loss on Drying (Moisture Content)	Not More Than 10%
Gel firm Test	Smooth streak line with no cut in agar
Gel melting temperature	85°C - 95°C
Total microbial count	Less than 1000 cfu/g
<i>E. coli</i>	Absent
<i>Salmonella</i>	Absent
<i>Pseudomonas aeruginosa</i>	Absent
<i>Staphylococcus aureus</i>	Absent
Gel strength (1.5% gel, at 20° C)	1000 ± 75 G/cm ²

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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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.