1228-AGAR AGAR SPECIAL
(Equivalent to Agar Nobel)

INTENDED USE

Used as a solidifying agent in bacteriological routine laboratory work like preparation of microbiological culture media, plant tissue culture media, and for pharmaceutical preparations etc.

PRODUCT SUMMARY AND EXPLANATION

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. Agar are routinely used as a solidifying agent because of several facts like, good transparency to allow identification of colony type, consistent gelling (32°C-40°C) and melting (approximately 85°C) temperatures, free from toxic substances that inhibits bacterial growth etc.

PRINCIPLE

Agar Agar is used in routine bacteriological laboratory works like in preparation of bacterial, fungal, and plant tissue culture media, in pharmaceutical preparations, where clarity, compatibility are not of prime importance. When suspended in cold water, it swells but does not dissolve. However, it readily dissolves in boiling water and solubility is facilitated by soaking the powder in cold water. The main advantage of this agar is the absence of inhibitors, which could interfere in the micro-organisms growth. It has excellent transparency, high hysteresis and very reliable reproducibility.

INSTRUCTION FOR USE

Agar Agar is a gelling agent used in the preparation of culture media and other bacteriological applications. It is generally used in a concentration of 1 - 2% for microbiological culture media preparations, 0.5% for motility testing and 0.1% maximum for anaerobes and microaerophiles growth.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Yellowish to creamish colour free flowing powder.
Solubility (2% soln. at 90ºC)	:	Soluble in hot water. Near to clear.
Clarity (1% Soln. at 121ºC)	:	Near to clear, light yellowish colour jelly.
pH (2% Soln. at 25ºC)	:	6.0 – 7.0
Loss on drying (at 105ºC)	:	NMT – 12.0%
Acid Insoluble Ash	:	NMT – 0.5%
Gelling Temp.	:	36 – 38ºC
Melting Temp.	:	85 – 88ºC
Total Ash	:	NMT – 4.0%
Gel Strength (1.5% Gel)	:	NLT – 900 g/cm^2
Heavy Metals (Pb)	:	NMT – 20ppm
Microbial Test	:	Passes Test

PACKAGING

Standard packing is 100gm, 500gm, 5kg in plastic bottle. After packing tightly closed in a dry and well- ventilated place.

STORAGE

Store at room temperature in cool place, Keep container tightly closed in a dry and well-ventilated place. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

Product Deterioration: Do not use product if any contamination, discoloration or other sign of deterioration is found.

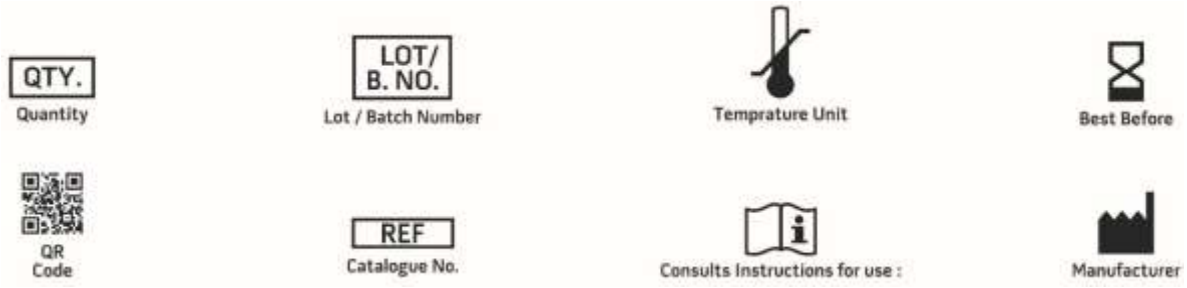
DISPOSAL

After use, contact a licenced professional waste disposal service to dispose off this material. Dispose of as unused product.

REFERENCES

1. Francavilla M, Pineda A, Lin C S K, Franchi M, Trotta P, Romero A A, Luque R. 2013. Natural porous agar materials from macroalgae. Carbohydrate polymers 2-13.

2. 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.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

Revision: 05th Oct. 2019