## **PhytoTechnology Laboratories®**



"Helping To Build A Better Tomorrow Through Plant Science"TM

## **Product Information Sheet**

A175 Agar, TC Purified Grade - Gelidium

Synonym: Agar-Agar, Gum Agar

CAS: 9002-18-0

**Properties** 

Form: Powder

Appearance: Off-white to Cream Application: Gelling Agent

Solubility: Partially Soluble in Cold Water; Soluble in Boiling Water

Typical Working

6 to 10 grams per liter

Concentration: Storage Temp:

Room Temperature

Other Notes:

Gel Strength: 700-1100 g/cm<sup>2</sup>

Ash Content: <2.0%

Plant Tissue Culture Tested

## **Application Notes**

Agar is produced from a family of red seaweeds (*Rhodophycae*) primarily from two genera, *Gelidium* and Gracilaria. Agar is a mixture of agarose and agaropectin. Product A175 is produced from *Gelidium* and typically has higher gel strength than those produced from *Gracilaria*.<sup>2</sup>

Agar is by far the most common gelling agent used in plant tissue culture. It is used at a wide range of concentrations from 6 g/L for a slightly firm gel to 10 g/L for a brick-like gel; however, 6-8 g/L is the more commonly used range.

PhytoTechnology Laboratories® also carries agar produced from *Gracilaria*, Product No. A111.

Please Note: While *Phyto*Technology Laboratories® tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

## References

A175-Info-2

- 1. Merck **13**, 184
- 2. McHugh, D.J. (2003). A guide to the seaweed industry. FAO Fisheries Technical Paper 441, Food and Agriculture Organization of the United Nations, Rome.

**PhytoTechnology Laboratories®** 

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