



>>Entry Name: Agar

ENTRY UNDER REVIEW

Synonym(s): Agar-agar. Gum agar. Gelose. Japan agar. Bengal isinglass. Ceylon isinglass. Chinese isinglass. Japan isinglass. FEMA 2012. E406

CAS Registry Number: 9002-18-0

General Statement: See also [494-7](#)

Biological Source: Mucilaginous substance extracted from red marine algae (Rhodophyceae); *Gelidiella acerosa*, various *Gelidium* spp. *Gracilaria confervoides*, *Pterocladia capillacea* and *Pterocladia lucida* are used in various parts of the world. There is some species variation in gel structure and strength

Use/Importance: An important thickener, stabiliser and gelling agent in the food industry. Also used as protective colloid in photometric detn. of Sn, Mg, Si, $\text{SO}_4^{2(-)}$. Solid medium for the cultivation of bacteria.

Biological Use/Importance: Laxative-cathartic

Physical Description: Strips or fine powder

Solubility: Sl. sol. in hot H_2O

Other Data: Consists of a mixt. of 2 polysaccharides, Agarose BVL45-T and agaropectin, which has essentially the same struct except that a variable proportion of the sugars in the polymer are replaced by 4,6-*O*-(1-carboxyethylidene)galactose or by sulfated or methylated sugar residues such as to retain the alternating sequence of 3-linked β -D- and 4-linked α -L- units

Aldrich: 28287-1

Fluka: 5039

Sigma: A1296

Other: CarboMer Inc.

References:

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Bogan, E.J. *et al.*, *Ind. Eng. Chem., Anal. Ed.*, 1942, **14**, 849, (detn, $\text{SO}_4^{2(-)}$)

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Duckworth, M. *et al.*, *Carbohydr. Res.*, 1971, **18**, 1, (struct, bibl)

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Martindale, The Extra Pharmacopoeia, 32nd edn., Pharmaceutical Press, 1999, 1470

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