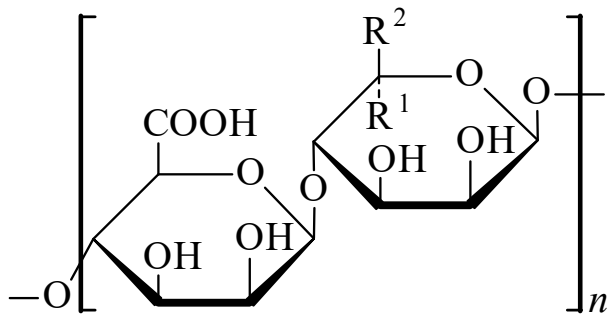
>>**Entry Name: Alginic acid,** BAN
ENTRY UNDER REVIEW
Synonym(s): Gum levan. Levan gum. Kelacid. E400



$R^1 = H, R^2 = COOH$
or $R^1 = COOH, R^2 = H$

CAS Registry Number: 9005-32-7
Related CAS Registry Numbers(s): 9005-31-6 9005-35-0 9005-36-1 9005-37-2 9005-38-3 9019-42-5

Molecular Formula: $C_6H_8O_6$
Molecular Weight: 176.126
Accurate Mass: 176.03209
Percentage Composition: C 40.92%; H 4.58%; O 54.50%
General Statement: A polymer consisting of various proportions of β-D-Mannuronic acid and α-L-Guluronic acid linked 1→4 and arranged in a block fashion. Polymeric. Minimum formula given.
Biological Source: Occurs as the major matrix polysaccharide in brown seaweed (Phaeophyceae) as an insol. complex of K, Na, Ca and Mg alginates
Use/Importance: Alginates are used to improve food texture, e.g. ice cream, pie fillings etc., as a tablet disintegrant and as paper coatings. Pharmaceutical aid for preparation of water-miscible pastes, creams and gels. Co-administered with antacid or H_2-receptor agonist for management of gastro-oesophageal reflux. Food additive: emulsifier, stabilizer, thickener
Optical Rotation: $[\alpha]_D$ –120 (as Na salt in H_2O)
Other Data: Approx. 200 grades of the acid and its salts comly. available. Alginates with the highest guluronic acid content display the strongest gel-forming activity.

Aldrich: A2830-9
Fluka: 5550
Sigma: A7003
Other: CarboMer Inc. (various grades)

>>**Derivative:** Na salt
Synonym(s): Algin. E401

CAS Registry Number: 9005-38-3
Physical Description: Pale yellow-brown powder
Solubility: BERDY SOL: Sol. H_2O; poorly sol. EtOH, hexane
UV: [neutral] λ_{max} 260 () (H_2O) (Berdy)

Aldrich: 18094-7
Fluka: 71240
Rare Chemicals Library: S41893-5
Sigma: A7128
Other: CarboMer Inc.

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