Comments Listed in USP 40–NF 35 S1. Produced by recombinant DNA expression in *Saccharomyces cerevisiae*. Structural equivalence (primary, secondary and tertiary) between rHA and human serum albumin (HSA) has been demonstrated.

18 Comments

A 100 mL aqueous solution of albumin containing 25 g of serum albumin is osmotically equivalent to 500 mL of normal human plasma.

Therapeutically, albumin solutions have been used parenterally for plasma volume replacement and to treat severe acute albumin loss. However, the benefits of using albumin in such applications in critically ill patients has been questioned.[19]

The EINECS number for albumin is 274-272-6.

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22 Date of Revision

4 May 2017.

Alginic Acid

1 Nonproprietary Names

BP: Alginic Acid

PhEur: Alginic Acid

USP–NF: Alginic Acid

2 Synonyms

Acidum alginicum; E400; *Kelacid*; L-gulo-D-mannoglycuronan; polymannuronic acid; *Protacid*; *Satialgine H8*.

3 Chemical Name and CAS Registry Number

Alginic acid [9005-32-7]

4 Empirical Formula and Molecular Weight

Alginic acid is a linear glycuronan polymer consisting of a mixture of β-(1→4)-D-mannosyluronic acid and α-(1→4)-L-gulosyluronic acid residues, of general formula $(C_6H_8O)_n$. The molecular weight is typically 20 000–240 000.

5 Structural Formula

The PhEur 9.2 describes alginic acid as a mixture of polyuronic acids $[(C_6H_8O_6)_n]$ composed of residues of D-mannuronic and L-glucuronic acid, and obtained mainly from algae belonging to the Phaeophyceae. A small proportion of the carboxyl groups may be neutralized.

See also Section 4.