CLAIMS:

1. A manufacturing method of a drug carrier, comprising the following steps:

providing an aqueous solution of an alginate salt having 1 part by weight and a pH value of about 7.4, wherein the aqueous solution of the alginate salt is prepared by dissolving the alginate salt in a NaOH solution;

providing an aqueous solution of sodium tripolyphosphate having 3.3-10 parts by weight and a pH value of about 7.4, wherein the aqueous solution of sodium tripolyphosphate is prepared by dissolving sodium tripolyphosphate in a NaOH solution;

providing an aqueous solution of Amoxicillin having 10-30 parts by weight and a pH value of about 7.4, wherein the aqueous solution of Amoxicillin is prepared by dissolving Amoxicillin in a NaOH solution;

mixing the aqueous solution of the alginate salt, the aqueous solution of sodium tripolyphosphate, and the aqueous solution of Amoxicillin;

adding an aqueous solution of chitosan having 8.3-25 parts by weight and a pH value of about 4 to form an active mixture; and

making the active mixture react from 5 to 60 minutes to allow the alginate salt, the sodium tripolyphosphate, the Amoxicillin, and the chitosan to self-assemble to form the drug carrier;

wherein an encapsulation rate of the active substance encapsulated by the drug carrier is from 55% to 75%.

2. The manufacturing method according to claim 1, wherein the drug carrier structure has a particle size from 110 nm to 160 nm.

3. The manufacturing method according to claim 1, wherein the drug carrier structure in the aqueous solution has a surface potential from 15 mV to 25 mV.

4. The manufacturing method of claim 1, wherein the active substance in the drug carrier has a weight equal to 32 % to 38 % of the weight of the drug carrier.