and bioavailability of the dispersed active agent. This particularly applies to active agents having hydrogen bond donor moieties or proton donor moieties. It is believed that the polyvinyllactam polyvinylacetate poly(alkylene glycol) graft copolymer acts as a hydrogen bond acceptor which forms strong hydrogen bonds to the dispersed active agent.

A major aim of the present invention is to provide desired release profiles of active agents having hydrogen bond donor moieties or proton donor moieties from their solid dispersion products with polyvinyllactam polyvinylacetate poly(alkylene glycol) graft copolymers.

Surprisingly, it has now been found that this problem can be solved by incorporating an pH modifier into the solid dispersion product.

Thus, the invention provides a formulation comprising a solid dispersion product comprising formulation comprising a solid dispersion product comprising

(a) an active agent having at least one of a hydrogen bond donor moiety and a proton donor moiety,
(b) a pharmaceutically acceptable polyvinyllactam polyvinylacetate poly(alkylene glycol) graft copolymer, and
(c) a pharmaceutically acceptable pH modifier.

The invention further provides a method for producing a formulation as described herein, wherein an active agent having at least one hydrogen bond donor moiety or proton donor moiety, a pharmaceutically acceptable pH modifier and a pharmaceutically acceptable polyvinyllactam polyvinylacetate poly(alkylene glycol) graft copolymer are intimately blended

The invention further provides a formulation comprising a solid dispersion product comprising

(a) an active agent having at least one of a hydrogen bond donor moiety and a proton donor moiety,

(b) a pharmaceutically acceptable polyvinyllactam polyvinylacetate poly(alkylene glycol) graft copolymer, and

(c) a pharmaceutically acceptable pH modifier;

wherein the active agent is selected from pharmaceutically active agents, cosmetically active agents and nutritional supplements, and is a compound with a solubility in water at 25°C and pH 7.0 of 0.01 g/100 ml or less.

The invention further provides a formulation comprising a solid dispersion product comprising a method for producing the formulation of any one of claims 1-15, wherein the active agent having at least one hydrogen bond donor moiety or proton donor moiety, the pharmaceutically acceptable pH modifier and the pharmaceutically acceptable polyvinyllactam polyvinylacetate poly(alkylene glycol) graft copolymer are intimately blended.

The invention further provides use of a pharmaceutically acceptable pH modifier for increasing the dispersion rate of a solid dispersion product in an aqueous medium relative to the dispersion rate of a comparative product in the aqueous medium and for increasing the release rate of an active agent from the solid dispersion product into the aqueous medium relative to the release rate of the active agent from the comparative product into the aqueous medium;

wherein the active agent has at least one of a hydrogen bond donor moiety and a proton donor moiety, is selected from pharmaceutically active agents, cosmetically active agents and nutritional supplements, and is a compound with a solubility in water at 25°C and pH 7.0 of 0.01 g/100 ml or less;

the solid dispersion product comprises

(a) the active agent,

(b) a pharmaceutically acceptable polyvinyllactam polyvinylacetate poly(alkylene glycol) graft copolymer, and

(c) the pharmaceutically acceptable pH modifier; and

the comparative product differs from the solid dispersion product in lacking the pharmaceutically acceptable pH modifier.

The term "pharmaceutically acceptable", as used herein, refers to a compound that does not cause acute toxicity when the formulation of the invention comprising it is administered in an amount that is required for medical or cosmetic treatment or medical prophylaxis, or that is taken up by consumption of the maximum recommended intake of a nutritional product comprising the formulation of the invention. Expediently, all components ~~of the~~ formulation of the present invention are pharmaceutically acceptable.