binding to the surface of the particles and/or loosely associated with the particles. Also provided are methods of using the compositions, e.g., in the treatment of acne.

BRIEF DESCRIPTION OF THE FIGURES

FIG. 1 provides the results of a stability assay reported in the Experimental section below, where the results demonstrate that minocycline associated with porous calcium phosphate particles exhibits greater stability than free minocycline.

FIG. 2 provides the results of a pH release assay reported in the Experimental section below, where the results demonstrate that minocycline associated with porous calcium particles is released at stratum corneum skin pH conditions and is not degraded when released.

FIG. 3 provides a picture of both free minocycline powder under white light and black light. The picture shows that minocycline associated with porous calcium phosphate particles exhibits less fluorescence than free minocycline.

FIG. 4 provides a picture of silicone oil, silicone oil containing free minocycline, and silicone oil containing minocycline associated with porous calcium phosphate particles. The picture shows that minocycline associated with porous calcium phosphate particles exhibits less fluorescence than free minocycline.

FIG. ~~6~~ 5 graphically provides the results of a dermal delivery assay reported in the Experimental section, below. The results show that minocycline associated with porous calcium phosphate particles is delivered in a sustained release manner into the skin.

DETAILED DESCRIPTION

Topical minocycline compositions are provided. In some instances, the compositions include an amount of minocycline associated with porous calcium particles, e.g., via entrapment in the pores of the particles and/or ionic binding and/or non-covalent binding to the surface of the particles and/or loosely associated with the particles. Also provided are methods of using the compositions, e.g., in the treatment of acne.

Before the present invention is further described, it is to be understood that this invention is not limited to particular embodiments described, as such may vary. It is also