

CLAIMS

1. An aqueous formulation comprising a structural protein and an alcohol, wherein the structural protein has a molecular weight of between 20 kDa and 140 kDa, wherein the structural protein is a self-assembling silk protein comprising at least two identical repetitive units, and wherein the alcohol is selected from the group consisting of ethanol, methanol, and isopropanol.
2. The aqueous formulation of claim 1, wherein said formulation comprises between 60 wt% and 90 wt% alcohol, between 0.05 wt% and 5 wt% a structural protein, and between 5 wt% and 39.95 wt% water.
3. The aqueous formulation of claim 1 or 2, wherein the structural protein has a molecular weight of between 20 kDa and 95 kDa or between 30 kDa and 75 kDa, and more preferably of between 40 kDa and 55 kDa.
4. The aqueous formulation of any one of claims 1 to 3, wherein said formulation has a complex viscosity of between 0.04 Pa·s and 30 Pa·s, preferably of between 0.2 Pa·s and 30 Pa·s, and more preferably of between 0.8 Pa·s and 15 Pa·s.
5. The aqueous formulation of any one of claims 1 to 4, wherein the formulation is a hydrogel.
6. The aqueous formulation of any one of claims 1 to 5, wherein the silk protein is a recombinant silk protein.
7. The aqueous formulation of any one of claims 1 to 6, wherein the repetitive units are independently selected from the group consisting of module C having the sequence according to SEQ ID NO: 1 or a variant thereof, and module C^{Cys} having the sequence according to SEQ ID NO: 2 or a variant thereof.
8. The aqueous formulation of any one of claims 1 to 7, wherein said formulation, preferably the hydrogel, further comprises a compound, which compound is poorly

water soluble, water insoluble, lipophilic, or oily, and wherein the compound is preferably selected from the group consisting of a pharmaceutical compound, a detergent compound, a cosmetic compound, a chemical compound, and a coloring compound.

9. A method for producing an aqueous formulation comprising a structural protein and an alcohol, the method comprising the steps of:
 - (i) providing an aqueous solution comprising the structural protein and an aqueous solution comprising the alcohol, and
 - (ii) mixing the aqueous solutions, thereby obtaining the aqueous formulation comprising the structural protein and the alcohol,wherein the structural protein has a molecular weight of between 20 kDa and 140 kDa, wherein the structural protein is a self-assembling silk protein comprising at least two identical repetitive units, and wherein the alcohol is selected from the group consisting of ethanol, methanol, and isopropanol.
10. The method of claim 9, wherein the method further comprises subsequent to step (i) a step of adding the aqueous solution comprising the alcohol to the aqueous solution comprising the structural protein, wherein the aqueous solution comprising the alcohol is preferably added to the aqueous solution comprising the structural protein in one motion/at once or within no more than 10 seconds.
11. The method of claim 10, wherein the mixing is performed by avoiding the application of sheer forces, preferably by (gently) agitating, swiveling.
12. The method of any one of claims 9 to 11, wherein the aqueous formulation of any one of claims 1 to 7 is formed.
13. The method of any one of claims 9 to 12, wherein the method further comprises the step of adding a compound to
the aqueous solution comprising the structural protein provided in step (i),
the aqueous solution comprising the alcohol provided in step (i), and/or
the mixture in step (ii),

wherein the compound is poorly water soluble, water insoluble, lipophilic, or oily, and wherein the compound is preferably selected from the group consisting of a pharmaceutical compound, a detergent compound, a cosmetic compound, a chemical compound, and a coloring compound.

14. An aqueous formulation comprising a structural protein and an alcohol obtainable by the method of any one of claims 9 to 13.
15. A method for producing an article comprising the steps of:
 - (i) providing an aqueous formulation comprising a structural protein and an alcohol according to claims 1 to 8 or 14, and
 - (ii) forming an article out of/from the formulation provided in (i).
16. The method of claim 15, wherein the method further comprises the step of adding a compound to the aqueous formulation provided in step (i) or to the article formed in step (ii), wherein the compound is poorly water soluble, water insoluble, lipophilic, or oily, and wherein the compound is preferably selected from the group consisting of a pharmaceutical compound, a detergent compound, a cosmetic compound, a chemical compound, and a coloring compound.
17. An article obtainable by the method of claim 15 or 16.
18. A cosmetic or pharmaceutical composition comprising the aqueous formulation comprising a structural protein and an alcohol according to claims 1 to 8 or 14, or the article according to claim 17.
19. Use of the aqueous formulation comprising a structural protein and an alcohol according to claims 1 to 8 or 14, or the article according to claim 17 for the protection of a compound, for sustained or controlled release of a compound, for prolongation of the retention time of a compound, or for the formulation of a poorly water soluble, a water insoluble, a lipophilic, or an oily compound,

wherein the compound is selected from the group consisting of a pharmaceutical compound, a detergent compound, a cosmetic compound, a chemical compound, and a coloring compound.