**Claims**

1. A kit for forming a bioadhesive, comprising a first container containing a first formulation and a second container containing a second formulation, said first formulation comprises gelatin and alginate and said second formulation comprises a coupling agent for coupling said gelatin and/or for coupling said alginate and/or for coupling said gelatin to said alginate, wherein at least one of said first formulation and said second formulation comprises montmorillonite.

2. The kit of claim 1, wherein a concentration of said gelatin in a bioadhesive obtained by combining said first formulation and said second formulation at volume ratio of 1:9 to 25:1, ranges from 50 mg/ml to 500 mg/ml.

3. The kit of claim 1, wherein a concentration of said alginate in a bioadhesive obtained by combining said first formulation and said second formulation at volume ratio of 1:9 to 25:1, ranges from 5 mg/ml to 100 mg/ml.

4. The kit of claim 1, wherein a concentration of said montmorillonite in a bioadhesive obtained by combining said first formulation and said second formulation at volume ratio of 1:9 to 25:1, ranges from 1 mg/ml to 50 mg/ml.

5. The kit of claim 1, wherein a concentration of said coupling agent in a bioadhesive obtained by combining said first formulation and said second formulation at volume ratio of 1:9 to 25:1, ranges from 1 mg/ml to 40 mg/ml.

6. The kit of claim 1, wherein, in a bioadhesive obtained by combining said first formulation and said second formulation at volume ratio of 1:9 to 25:1, a concentration of said gelatin ranges from 200 mg/ml to 400 mg/ml, a concentration of said alginate ranges from 20 mg/ml to 40 mg/ml, a concentration of said montmorillonite ranges from 5 mg/ml to 30 mg/ml and a concentration of said coupling agent ranges from 10 mg/ml to 30 mg/ml.

7. The kit of any one of claims 1-6, wherein a concentration of said gelatin in a bioadhesive obtained by combining said first formulation and said second formulation at volume ratio of 1:9 to 25:1, is less than 500 mg/ml, and said bioadhesive is characterized by a

room temperature viscosity that ranges from 1 Pa-sec to 50 Pa-sec upon said combining and up to 30 minutes from said combining.

8. The kit of any one of claims 1-7, wherein said first formulation and/or said second formulation further comprises a bioactive agent.

9. The kit of claim 8, wherein a concentration of said bioactive agent in a bioadhesive obtained by combining said first formulation and said second formulation ranges from 0.1 percent weight per volume to 10 percent weight per volume of the total volume of said bioadhesive.

10. The kit of any one of claims 1-9, being for forming a bioadhesive matrix upon curing, wherein a curing time for forming said matrix ranges from 5 seconds to 30 minutes.

11. The kit of claim 10, wherein said matrix is characterized by a burst strength expressed in a maximal pressure required to rupture a layer of said matrix having a thickness of about 1 mm and afforded by applying about 0.5 ml of said bioadhesive over and around a hole of about 3.0 mm uniform diameter punched in a collagen sheet, according to Standard Test Method for Burst Strength of Surgical Sealants ASTM F2392-04, said maximal pressure ranges from 350 mmHg to 650 mmHg.

12. The kit of any one of claims 1-11, being an applicator device for dispensing said first formulation from said first container and said second formulation from said second container to thereby form the bioadhesive.

13. The kit of claim 12, wherein said applicator comprises:

said first container in a form of a first syringe having a first barrel defining a first chamber for retaining said first formulation, and a first plunger having one end received in said chamber for extruding said first formulation from said first chamber;

said second container in a form of a second syringe having a second barrel defining a second chamber for retaining said second formulation, and a second plunger having one end received in said second chamber extruding said second formulation from said second chamber;

a nozzle having a distal end, a proximal end, and a lumen extending through said nozzle and means for connecting said proximal end of said nozzle to said first chamber and said second chamber such that said first formulation and said second formulation come in contact in said lumen,

whereby forming the bioadhesive that may be ejected through said nozzle upon driving said first plunger and said second plunger.

14. Use of the kit of any one of claims 1-13, for forming a bioadhesive matrix.

15. The use of claim 14, wherein said bioadhesive matrix is for adhering a biological object.

16. The use of claim 14, wherein said bioadhesive matrix is for sealing a rupture in a biological object.

17. The use of claim 14, wherein said bioadhesive matrix is for bonding at least two objects to one another, at least one of the objects being a biological object.

18. A bioadhesive matrix, formed by contacting a first formulation that comprises gelatin and alginate, and a second formulation that comprises a coupling agent for coupling said gelatin and/or for coupling said alginate and/or for coupling said gelatin to said alginate, wherein at least one of said first formulation and said second formulation comprises montmorillonite.

19. The bioadhesive matrix of claim 18, further comprising a bioactive agent sequestered therein, the bioadhesive matrix is a drug-eluting bioadhesive matrix.

20. A bioadhesive comprising:

a) gelatin;

b) alginate;

c) montmorillonite;

d) a coupling agent for coupling said gelatin and/or for coupling said alginate and/or for coupling said gelatin to said alginate; and

e) water.