CLAIMS

1. An absorbent material including:

a first layer comprising a hydrophilic non-woven fabric; and

a second layer comprising a hydrophobic film, the second layer arranged adjacent to the first layer;

wherein the first layer is adapted to allow a gas and a liquid to pass through;

wherein the second layer is adapted to allow the gas to pass through and is adapted to minimize or block the liquid from passing through; and wherein the first layer comprises short fibers having an average length of 30 mm to 60 mm.

2. The absorbent material of claim 1, wherein the hydrophilic non-woven fabric comprises a polymer.

3. The absorbent material of claim 2, wherein the polymer is polypropylene or polyethylene.

4. The absorbent material of any one of the preceding claims, wherein the hydrophobic film comprises polyethylene.

5. The absorbent material of any of the preceding claims, wherein the thickness of the absorbent material is 0.1 millimetres (mm) to 5 mm.

6. The absorbent material of any one of the preceding claims, wherein the second layer is laminated adjacent to the first layer.

7. The absorbent material of any one of the preceding claims, wherein the first layer is made using a thermal bonding process.

8. The absorbent material of claim 1, wherein the short fibers have an average length of 38 mm to 51 mm.

9. The absorbent material of claim 1, wherein the first fluid is air.

10. The absorbent material of claim 1, wherein the absorbent material consists of the first layer and the second layer.

11. The absorbent material of claim 1, further comprising a super absorbent polymer.

12. The absorbent material of claim 11, wherein the super absorbent polymer is integrated with the first layer or integrated with the second layer.

13. The absorbent material of claim 1, wherein the first layer or the second layer is added with biodegradable additives.

14. A bed sheet made of an absorbent material consisting of two layers:

a first layer comprising a hydrophilic non-woven fabric; and

a second layer comprising a hydrophobic film, the second layer arranged adjacent to the first layer;

wherein the first layer is adapted to allow a gas and a liquid to pass through;

wherein the second layer is adapted to allow the gas to pass through and is adapted to minimize or block the liquid from passing through; and wherein the first layer comprises short fibers having an average length of 30 mm to 60 mm.

15. The bed sheet of claim 14, wherein the absorbent material of the bed sheet is disposable.

16. The bed sheet of claim 14 or 15, wherein the hydrophilic non-woven fabric comprises polypropylene or polyethylene.

17. A method of manufacturing an absorbent material, the method comprising:

the step of thermal bonding to form a first layer comprising a hydrophilic non-woven fabric;

the step of spin finishing prior to the step of thermal bonding;

the step of laminating a second layer comprising a hydrophobic film adjacent to the first layer;

wherein the first layer is adapted to allow a gas and a liquid to pass through;

wherein the second layer is adapted to allow the gas to pass through and is adapted to minimize or block the liquid from passing through; wherein the first layer comprises short fibers having an average length of 30 mm to 60 mm;

and wherein the step of thermal bonding comprises the step of carding.

18. The method of claim 17, wherein the step of laminating the second layer adjacent to the first layer comprises heat, mechanical or chemical means.

19. The method of any one of claims 17 or 18, wherein the absorbent material consists of the first layer and the second layer.

20. The method of any one of claims 17 to 19, wherein the step of thermal bonding to form the first layer occurs at a temperature of 150°C to 180°C.

21. The method of any one of claims 17 to 20, further comprising the step of manufacturing fibers for the hydrophilic non-woven fabric.

22. The method of claim 21, wherein the step of manufacturing fibers for the hydrophilic non-woven fabric comprises the step of crimping.

23. The method of claim 22, wherein the step of crimping occurs at a pressure of 0.1 bar to 5.0 bar.

24. The method of claim 22 or 23, wherein the step of crimping occurs at a temperature of 60°C to 120°C.