CLAIMS

1. An absorbent material, the absorbent material comprising:

    a matrix formed from a fibrous material, one or more polymerised binder reagents, and a reinforcing filler, wherein the absorbent material comprises:

        0.05 – 5 dry weight% one or more polymerised binder reagents;

        30 – 60 dry weight% fibrous material; and

        40 - 70 dry weight% reinforcing filler;

    wherein the absorbent material is formed into discrete agglomerates or discrete pellets.

2. The absorbent material according to claim 1, wherein the absorbent material comprises a polymerisation activator.

3. The absorbent material according to claim 2, wherein the absorbent material comprises 0.005 - 0.5 dry weight% polymerisation activator.

4. The absorbent material according to any one of the preceding claims, wherein the fibrous material comprises cellulosic fibres.

5. The absorbent material according to any one of the preceding claims, wherein the fibrous material comprises synthetic fibres.

6. The absorbent material according to any one of the preceding claims, wherein the reinforcing filler is a solid particulate material.

7. The absorbent material according to any one of the preceding claims, wherein the adsorbent material comprises active adsorption agents.

8. A method for producing an absorbent material, the method comprising the steps of:

combining a feedstock comprising 30 – 60 dry weight% fibrous material and 40 - 70 dry weight% reinforcing fillers with one or more binder reagents; and

introducing the feedstock into an agglomeration apparatus in the presence of a polymerisation activator to produce the absorbent material comprising 0.05 – 5 dry weight% polymerised binder reagents in the form of discrete agglomerates or discrete pellets.

9. The method according to claim 8, wherein the binder reagents are selected from one or more of styrene monomer compounds, vinyl monomer compounds or silicon monomer compounds.

10. A method of absorbing a liquid, the method comprising the step of contacting the liquid with the absorbent material of claims 1 to 14 to absorb at least a portion of the liquid into the absorbent material to produce a loaded absorbent material

11. The method according to claims 10, wherein at least a portion of entrained particles or dissolved substances within the liquid will be absorbed by the absorbent material

12. The method according to claim 10 or claim 11, wherein the loaded absorbent material is directed to one or more treatment steps.

13. The method according to any one of claims 10 to 12, wherein the loaded absorbent material is subjected to a drying step.

14. The method according to any one of claims 11 to 13, wherein the loaded absorbent material is directed to disposal.

15. A method according to claim 12, wherein the loaded absorbent material is subjected to a high temperature treatment step to destroy combustible materials.