CLAIMS

1. An infill particle for artificial turf,
wherein said particle comprises a substrate which is impregnated with salt and said particle does not contain thermoplastic material,
wherein said substrate comprises cellulosic and/or hemicellulosic material,
wherein said particle has a volume of up to about 512 mm^3,
wherein said particle has a salt content of at least 5 % by weight, and
wherein said salt is dispersed throughout the particle.

2. The infill particle of claim 1, wherein said substrate consists essentially of cellulosic and/or hemicellulosic material.

3. The infill particle of claim 1, wherein said substrate consists of cellulosic and/or hemicellulosic material.

4. The infill particle of any one of claims 1 to 3, wherein said particle is a manufactured infill particle.

5. The infill particle of any one of claims 1 to 4, wherein said particle has a salt content of at least 20 % by weight.

6. The infill particle of any one of claims 1 to 5, wherein said particle has a volume of between 0.001 mm^3 and 512 mm^3.

7. The infill particle of any one of claims 1 to 6, wherein said particle has a volume of between 0.008 mm^3 and 125 mm^3

8. The infill particle of any one of claims 1 to 7, wherein said particle has a volume of between 1 mm^3 and 27 mm^3.

9. The infill particle of any one of claims 1 to 8, wherein the particle has the shape of a cube, cuboid, sphere, ellipsoid, spheroid, ovoid, or pyramid, preferably a cube, more preferably a cube of dimensions 2mm x 2mm x 2mm.

10. The infill particle of any one of claims 1 to 9, wherein the particle has corners, and wherein said corners are rounded.

11. The infill particle of any one of claims 1 to 10, wherein the particle has a smooth or polished surface.

12. The infill particle of any one of claims 1 to 11, wherein said substrate is wood.

13. The infill particle of claim 12, wherein the wood is natural or raw wood.

14. The infill particle of claim 13, wherein the wood is softwood or hardwood.

15. The infill particle of claim 14, wherein the wood is birch wood.

16. The infill particle of any one of claims 1 to 15, wherein the particle is impregnated with an oil or a preservative.

17. The infill particle of claim 16, wherein the oil is a natural oil, and the preservative is a natural preservative.

18. The infill particle of claim 17, wherein the oil is linseed oil.

19. A plurality of infill particles, wherein each infill particle is an infill particle as defined in any one of the preceding claims, and wherein the plurality of particles comprises two or more shapes of infill particle, and/or comprises two or more sizes of infill particle.

20. The plurality of infill particles of claim 19, wherein the two or more shapes are selected from the group consisting of a cube, cuboid, sphere, ellipsoid, spheroid, ovoid, or pyramid

21. The plurality of particles of claim 19 or claim 20 which comprises a first type of infill particle and a second type of infill particle, wherein said first type of infill particle has a volume at least 2 or 3 times the size of the second type of infill particle.

22. A method of producing the infill particle of any one of claims 1 to 18, the method comprising:

soaking in a salt solution a particle comprising a substrate which comprises cellulosic and/or hemicellulosic material, wherein the particle does not contain thermoplastic material and has a volume of up to about 512 mm^3; and optionally

drying the soaked particle.

23. The method of claim 22, further comprising polishing the particle.

24. The method of claim 22 or claim 23 wherein the salt solution has been heated to at least 50 ^{o}C, preferably to around 75 ^{o}C.

25. The method of any one of claims 22 to 24 wherein the particle remains in the salt solution for at least 10 minutes.

26. An artificial turf system, comprising:
an artificial turf carpet, the artificial turf carpet comprising artificial turf fibres; and
a plurality of infill particles of any one of claims 1 to 21.

27. The artificial turf system of claim 26 further comprising sand.

28. The method of any one of claims 22 to 25 comprising a step of obtaining the particle prior to the soaking step, the step comprising cutting cellulosic and/or hemicellulosic material to form particles having a volume per particle of up to about 512 mm^3 which are cuboid in shape, preferably cubes, and then sanding the cut particles in order to round the corners thereof.

29. Use of the infill particle of any one of claims 1 to 18 or the plurality of infill particles of any one of claims 19 to 21 as an infill for artificial turf.