CLAIMS

1. A root canal dental paste having:

a first portion including an amount of a ground combination of a calcium cement-based setting material and at least one antibiotic compound; and

a second portion including a non-setting material and at least one antibiotic compound and / or at least one compound selected from the group consisting of steroidal and non-steroidal compounds, wherein the first portion and second portion are subsequently combined to form a paste.

2. The dental paste of claim 1, wherein the at least one calcium cement material is selected from the group consisting of calcium sulphate, calcium phosphate, calcium chloride and calcium silicate.

3. The dental paste of any one of claims 1 or 2, wherein the non-settable material is at least one inert non-setting material selected from the group consisting of zinc oxide, polyethylene glycol, silicon oxide.

4. The dental paste of any one of claims 1- 3, wherein the setting calcium based material is a dihydrate form.

5. The dental paste of any one of claims 1-4, wherein the at least one antibiotic compound is incorporated into a matrix formed by the at least partially set calcium based material.

6. The dental paste of claim 1 wherein the concentration of antibiotic is 1 – 10% w/w.

7. The dental paste of claim 2 wherein the concentration of the at least one calcium cement material is 20 - 50% w/w.

8. A method of preparing a dental paste when used for the treatment of a root canal, wherein the method includes the steps of:

(a) preparing a first portion including combining an amount of a calcium cement based setting material and at least one antibiotic compound, wherein the at least one antibiotic compound is incorporated into a matrix formed by the calcium based setting material;

(b) allowing the first portion to at least partially set;

(c) grinding the first portion into a powder;

(d) preparing a second portion including combining at least one antibiotic compound and / or at least one compound selected from the group consisting of steroidal and non-steroidal compounds with a non-settable material; and

(e) combining the first portion and the second portion to form a paste.

9. The method of claim 8, wherein the at least one calcium cement material is selected from the group consisting of calcium sulphate, calcium phosphate, calcium chloride and calcium silicate.

8. The method of claim 8 or 9, wherein the non-settable material is at least one inert non-setting material selected from the group consisting of zinc oxide, polyethylene glycol, silicon oxide.