Claims

1. A corrosion inhibiting additive comprising:
   - a particulate first corrosion inhibitor comprising an organic cation of benzotriazole or derivate thereof in a cation exchange resin, and;
   - a particulate second corrosion inhibitor comprising a phosphate compound.

2. A corrosion inhibiting additive according to claim 1 wherein the phosphate compound comprises one or more metal phosphates.

3. A corrosion inhibiting additive according to claim 1 wherein the phosphate compound comprises a polyphosphate compound or a phosphosilicate compound.

4. A corrosion inhibiting additive according to claim 2 wherein the metal phosphate is zinc phosphate.

5. A corrosion inhibiting additive according to any preceding claim wherein the first and second corrosion inhibitors are provided as a mixture, and the mixture comprises a range of usable weight ratios of first corrosion inhibitor to second corrosion inhibitor of between 2:15 and 15:2 respectively, and preferably between 1:5 and 5:1 respectively, and preferably between 1:4 and 4:1 respectively, and preferably between 1:3 and 3:1 respectively.

6. A coating for a metal substrate comprising a first corrosion inhibitor, and a second corrosion inhibitor as claimed in claim 1, wherein the first and second corrosion inhibitors are provided in a polymer binder.

7. A coating according to claim 6 wherein the weight ratios of first corrosion inhibitor to second corrosion inhibitor comprise between 2:15 and 15:2 respectively, and preferably between 1:5 and 5:1 respectively, and preferably between 1:4 and 4:1 respectively, and preferably between 1:3 and 3:1 respectively.

8. A coating according to claim 6 wherein the combined first and second corrosion inhibitor comprise between 4 and 30 weight percent of the coating weight in wet form.

9. A coating according to claim 8 wherein combined first and second corrosion inhibitor comprises between 5 and 20 weight percent of the coating weight in wet form.

10. A coating according to any of claims 6-9 wherein the polymer is liquid at room temperature and pressure.

11. A coating according to any of claims 6-10 wherein the polymer binder is selected from one or more of an acrylic, polyester, epoxy, silicone, alkyd polyurethane or polyvinyl butyral.

12. A coating according to any of claims 6-11 wherein the organic cation is an azole or oxime.

13. A coating according to any of claims 6-12 wherein the cation exchange resin is an organic cation exchange resin.

14. A coating according to claim 13 wherein the organic cation exchange resin is styrene and/or divinylbenzene copolymer with a negatively charged group.

15. A method of manufacturing a corrosion inhibiting coating comprising combining:
- a first corrosion inhibitor comprising benzotriazole or a derivative thereof in a cation exchange resin;
- a second corrosion inhibitor comprising a phosphate compound; and
- a polymer binder.

16. A method of protecting a metal substrate comprising applying a corrosion inhibiting coating to the substrate, the corrosion inhibiting coating comprising:
- a first corrosion inhibitor comprising benzotriazole or a derivative thereof in a cation exchange resin;

- a second corrosion inhibitor comprising a phosphate compound; and
- a polymer binder.