Claims

1. An activator composition mixable with a non-OPC hydraulically-active material comprising ground granulated blast furnace slag (GGBS), pulverised fuel ash (PFA) or a mixture of GGBS and PFA, the activator composition comprising an activator, which is CaO or lime, and a polycarboxylate-ether-based (PCE) superplasticiser.

2. An activator composition according to claim 1, in which the activator and the PCE superplasticiser are mixed in a weight ratio of between 1:1 and 38:1.

3. An activator composition according to claim 1 or 2, comprising a further component , which is microsilica and/or PFA, preferably super-fine pulverised fuel ash (PFA).

4. An activator composition according to claim 3, in which the activator and the further component are mixed in a weight ratio of between 1.2:1 and 3:1.

5. An activator composition according to any preceding claim, in which the activator composition is contained within one or more water-soluble packages and is releasable from the one or more water-soluble packages on contact with water.

6. An activator composition according to any preceding claim, in which the PCE superplasticiser is in powder form.

7. An activator composition according to any preceding claim, in which a predetermined quantity of the activator composition is packaged in a package for use in mixing with a hydraulically-active material, the package preferably releasing the activator composition on contact with water.

8. An activator composition according to any preceding claim, in which the activator and the PCE superplasticiser are mixed in a weight ratio of between 1:1 and 6:1.

9. An activator composition for combining with a hydraulically-active material comprising ground granulated blast furnace slag (GGBS), pulverised fuel ash (PFA) or a mixture of GGBS and PFA, the activator composition comprising a first component consisting of CaO or lime and a second component consisting of a superplasticiser such as a PCE superplasticiser.

10. An activator composition according to claim 9, in which the activator and the superplasticiser are mixed in a weight ratio of between 1:1 and 38:1.

11. An activator composition according to claim 9 or 10, in which the superplasticiser is in powder form.

12. An activator composition according to claim 9, 10 or 11, further comprising a third component consisting of microsilica, PFA, or a mixture of microsilica and PFA, the PFA preferably being super-fine PFA.

13. An activator composition according to claim 12, in which the activator and the further component are mixed in a weight ratio of between 1.2:1 and 3:1.

14. An activator composition according to any of claims 9 to 13, in which a predetermined quantity of the activator composition is packaged in a package for use in mixing with a hydraulically-active material, the package preferably releasing the activator composition on contact with water.

15. An activator composition according to any of claims 9 to 14, in which the activator and the superplasticiser are mixed in a weight ratio of between 1:1 and 6:1.

16. An activator composition according to any of claims 1 to 15, in which the activator composition is in powdered form.

17. An activator composition according to any of claims 1 to 16, in which the activator composition is pre-blended.

18. Use of an activator composition in combination with a hydraulically-active

material comprising ground granulated blast furnace slag (GGBS), pulverised fuel ash (PFA), or a mixture of GGBS and PFA to form a cementitious binder, the activator composition comprising CaO or lime and a polycarboxylate-ether-based (PCE) superplasticiser, in which the proportion of hydraulically-active material by weight in the resulting binder is greater than 90%, and the proportion of activator composition by weight in the resulting binder is less than 10%.

19. Use of an activator composition as defined in claim 18, comprising the step of adding to the hydraulically-active material a predetermined quantity of the activator composition contained in a package, preferably a water-soluble package.