CLAIMS

1. Hydraulic binder characterized in that it comprises:

- at least 70% by weight of a solid mineral compound consisting of at least one mixture of silica, alumina and alkaline-earth metal oxides, the total sum of CaO and MgO representing at least 10% by weight of the solid mineral compound, and
- an activation system which is a mixture of a phosphoric acid-derived salt, of an alkali metal silicate and of a source of alkaline-earth metal, preferably a calcium source, the amount of phosphoric acid-derived salt in said activation system being at least 30% by weight.

2. Binder according to the preceding claim, characterized in that the solid mineral compound comprises at least 20% by weight of CaO and/or MgO.

3. Binder according to either of the preceding claims, characterized in that the solid mineral compound is chosen from amorphous or crystalline slags, fly ashes and/or glass powders.

4. Binder according to one of the preceding claims, characterized in that the solid mineral compound is chosen from steelmaking slags, blast furnace slags and class C fly ashes.

5. Binder according to one of the preceding claims, characterized in that said salt is chosen from polyphosphates of an alkali metal chosen from sodium, potassium or lithium and mixtures thereof.

6. Binder according to the claim 5, characterized in that said salt is a triphosphate or a diphosphate of an alkali metal.

7. Binder according to one of the preceding claims, characterized in that the activation system comprises, in addition to the phosphoric acid-derived salt, a silicate of an alkali metal chosen from potassium, lithium and/or sodium, in an amount ranging from 5% to 70% by weight relative to the total weight of the activation system.

8. Binder according to one of the preceding claims, characterized in that the activation system also comprises a source of an alkaline-earth metal, chosen from Portland cements, calcium aluminate cements, calcium sulphoaluminate cements, lime, calcium carbonate, dolomite and magnesium hydroxide, and mixtures thereof in an amount ranging from 5% to 70% by weight relative to the total weight of the activation system.

9. Binder according to the claim 8, characterized in that the source of alkaline-earth metal is preferably lime.

10. Binder according to one of the preceding claims, characterized in that the activation system consists of a mixture of a phosphoric acid-derived salt and of an alkali metal silicate.

11. Binder according to one of Claims 1 to 9, characterized in that the activation system consists of a mixture of a phosphoric acid-derived salt and of a source of alkaline-earth metal.

12. Binder according to one of the preceding claims, characterized in that the activation system comprises between 0.1% and 10% by weight, relative to its total weight, of a retarder of formula X^+A^- in which the cation X^+ is chosen from alkali metals, alkaline-earth metals, aluminium and the ammonium ion, and the anion A^- is chosen from acetate, citrate, formate, benzoate, tartrate, oleate, bromide or iodide anions.

13. Binder according to one of the preceding claims, characterized in that the activation system represents between 3% and 30% of the total weight of the binder, preferably between 5% and 25% of the total weight of the binder.

14. Binder according to one of the preceding claims, characterized in that it also comprises, in an amount of less than 27% by weight relative to the total weight of binder, Portland cement, high-alumina cement, sulphoaluminate cement, belite cement, cement formed of a pozzolanic mixture, silica fume, calcined schist, natural or calcined pozzolans, a source of calcium sulphate, such as plaster or hemihydrate, gypsum and/or anhydrite.

15. Concrete or mortar composition, characterized in that it is obtained by mixing granulates, sands and/or aggregates with at least one binder according to one of claims 1 to 14 in the presence of water.

16. Construction products such as adhesive mortars, pointing mortars, grouts, adhesives, screeds, floor coating, façade mortars, internal or external wall coatings, mineral paints, smoothing mortars, undercoats, single coats,

and mortars for rendering impermeable, obtained after hydration and curing of a concrete or mortar composition according to the preceding claim.