CLAIMS

1. An ambient curing coating composition comprising the reaction product of a tetra alkoxyorthosilicate or a partially condensed oligomer thereof and a polyester resin containing hydroxyl groups, wherein

   (a) the polyester resin has a number average molecular weight of between 1250 and 4000, measured according to ASTM D5296-11, and a hydroxyl equivalent weight of between 800 and 4500, calculated as disclosed in the description from the hydroxyl value measured according to ASTM E222 (revision 10), test method A, and

   (b) the ratio of alkoxy groups on the tetra alkoxyorthosilicate to hydroxyl groups on the ethylenically unsaturated polyester resin containing hydroxyl groups is in the range of 2:1 to 40:1.

2. The ambient curing coating composition of Claim 1, wherein the reaction product is prepared from 15 to 40 weight % of tetra alkyoxyorthosilicate or partially condensed oligomer thereof, and 60 to 85 weight % of ethylenically unsaturated polyester resin containing hydroxyl groups, wherein weight% is based on the total weight of non volatile components in the composition used to prepare the reaction product.

3. The ambient curing coating composition of any preceding claim wherein the polyester resin containing hydroxyl groups is ethylenically unsaturated.

4. The ambient curing coating composition of any preceding claim wherein the polyester resin containing hydroxyl groups comprises less than two hydroxyl groups per molecule.

5. The ambient curing coating composition of any preceding claim, wherein the tetra- alkyoxyorthosilicate or a partially condensed oligomer thereof, is a

tetra-C1-C5 alkyoxyorthosilicate or a partially condensed oligomer thereof, for example a tetra ethoxyorthosilicate or a partially condensed oligomer thereof.

6. The ambient curing coating composition of any preceding claim, wherein the polyester resin has a number average molecular weight of between 1250 and 2500, and a hydroxyl equivalent weight of between 800 and 3000.

7. The ambient curing coating composition of any preceding claim, wherein said coating composition has a solids content of at least 70 vol % and/or a volatile organic content (VOC) measured according to EPA Federal Method 24 not exceeding 250 g/l.

8. The ambient curing coating composition according to any preceding claim, wherein the polyester resin containing hydroxyl groups is an alkyd resin.

9. A one-pack coating composition, comprising the ambient curing coating composition as defined in any preceding claim.

10. Silicate-modified polyester resin obtainable by dealcoholisation condensation of a tetra-alkoxyorthosilicate or a partially condensed oligomer thereof and a polyester resin which contains hydroxyl groups, wherein

(a) the polyester resin has a number average molecular weight of between 1250 and 4000, measured according to ASTMD5296-11, and a hydroxyl equivalent calculated as disclosed in the description from the hydroxyl value measured according to ASTM E222 (revision 10), test method A, of between 800 and 4500, and

(b) the ratio of alkoxy groups on the tetra alkyoxyorthosilicate to hydroxyl groups on the ethylenically unsaturated polyester resin containing hydroxyl groups is in the range of 2:1 to 40:1.

11. Process for the preparation of a silicate-modified polyester resin according to claim 10 by heating, in the presence of a catalyst, a mixture of the alkoxyorthosilicate or a partially condensed oligomer thereof with the polyester resin which contains hydroxyl groups.

12. Use of the silicate-modified polyester resin of claim 10 for coating a substrate.

13. Process for coating a substrate comprising the steps of (i) applying on the substrate a coating composition according to any one of claims 1-8, and (ii) curing the applied coating composition.

14. Process according to claim 13 wherein curing is performed at a temperature in the range of -5°C to 30°C.

15. Coated substrate obtainable by the process of claim 13 or claim 14.