

line solution of silver in ammonia. Its IR spectrum exhibited C=C bands and COOH bands but ceased to reveal anhydride bands.

EXAMPLE 18

Bonding agent

A mixture of
50 parts bis-GMA
50 parts TEDMA
10 parts polymethacrylated polyaldehydopolymaleic acid
1 part butyl dimethylaniline
1 part camphor quinone

is tested on bovine dentin by the procedure described with reference to Example 9. The mean bond strength is 9.5 N/mm².

EXAMPLE 19

Bonding agent for fingernail material

5 fingernails at a time are coated with either a thin film of the bonding agent from Example 16 (Group 1) or with a thin film of a mixture that is identical except that the polymethacrylated polymaleic acid is left out (Group 2). The coatings are cured along with an approximately 1-mm thick area of about 2×2 mm of Liquicoat, a thin, light-curing composite manufactured by the firm of Merz.

Although the composite layers in Group 2 drop off in 2 days, 4 samples from Group 1 adhere to the fingernails for 2 more weeks.

It will be understood that the specification and examples are illustrative but not limitative of the present invention and that other embodiments within the spirit and scope of the invention will suggest themselves to those skilled in the art.

What is claimed:

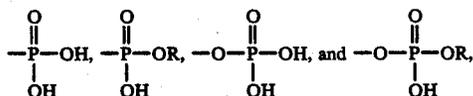
1. An oligomeric or prepolymeric organic compound that contains (a) several polymerizable unsaturated groups and (b) several acid radicals, their salts, or their reactive derivatives bonded to (c) an oligomeric or prepolymeric backbone.

2. A compound according to claim 1, containing at least three polymerizable unsaturated groups and at least three acid radicals, their salts, or their reactive derivatives.

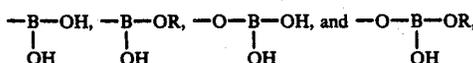
3. A compound according to claim 1, wherein the polymerizable unsaturated groups comprise at least one of acrylic, methacrylic, vinyl and styryl groups.

4. A compound according to claim 1, wherein the polymerizable unsaturated groups comprise at least one of acrylic and methacrylic groups.

5. A compound according to claim 1, wherein the acid radicals are carboxylic acid radicals, the radicals



the radicals $\text{---SO}_2\text{H}$, SO_3H , or $\text{---O---SO}_3\text{H}$ or the radicals



wherein R is alkyl, aryl or vinyl.

6. A compound according to claim 1, wherein (b) is present in the form of an acid halide, acid anhydride, a readily hydrolyzable-into-acid acid amide, acid nitrile, or acid ester.

7. A compound according to claim 1, wherein the oligomeric or prepolymeric backbone (c) is a homo- or co-polymer of ethylenically unsaturated monomers.

8. A compound according to claim 1, wherein the oligomeric or polymeric backbone (c) is a polyester, polyamide, polyether, polysulfone, polyphosphazene, or polysaccharide.

9. A compound according to claim 1, containing aldehyde, epoxide, isocyanate, or halotriazine groups in addition to the acid groups and polymerizable groups.

10. A mixture according to claim 1, wherein the polymerizable unsaturated oligomer of (a) has a molecular weight of at least 500.

11. A mixture according to claim 1, wherein the polymerizable unsaturated prepolymer of (a) has a molecular weight of at least 1,500.

12. A mixture according to claim 1, wherein the polymerizable unsaturated prepolymer of (a) has a molecular weight of maximal 100,000.

13. A mixture according to claim 1, wherein the polymerizable unsaturated prepolymer of (a) has a molecular weight of maximal 20,000.

14. A compound according to claim 1, wherein (a) comprises (meth)acrylic radicals, and (b) comprises a carboxylic group and (c) comprises a poly(meth)acrylic backbone.

15. A compound according to claim 1, wherein (a) comprises (meth)acrylic radicals, and (b) comprises a carboxylic group and (c) comprises an oligomaleic backbone.

16. A compound according to claim 1, wherein (a) comprises (meth)acrylic radicals, and (b) comprises a carboxylic group with (c) comprises a polymaleic backbone.

17. A compound according to claim 1, wherein (a) comprises (meth)acrylic radicals, and (b) comprises carboxylic group and phosphoric groups, and (c) comprises a polymaleic backbone.

18. A compound according to claim 1, wherein (a) comprises (meth)acrylic radicals, and (b) comprises a halophosphoric acid group, and (c) comprises a poly(meth)acrylic backbone.

19. A compound according to claim 1, wherein (a) comprises (meth)acrylic radicals, and (b) comprises a sulfonic acid group, and (c) comprises a poly(meth)acrylic backbone.

20. A compound according to claim 1, wherein (a) comprises (meth)acrylic radicals, and (b) comprises a boric acid group, and (c) comprises a poly(meth)acrylic backbone.

21. A compound according to claim 1, wherein (a) comprises (meth)acrylic radicals, and (b) comprises a carboxylic group, and (c) comprises a polymaleic backbone, and said polymaleic backbone containing aldehyde groups.

22. A polymerizable mixture comprising at least one compound according to claim 1.

23. A polymerizable mixture according to claim 22, further containing one or more polymerizable unsaturated compounds.

24. A polymerizable mixture according to claim 22, further containing compounds with aldehyde, epoxide, isocyanate, or halotriazine groups.