Claims

1. Composition comprising formic acid and at least one C1-C4 alkyl ester of lactic acid, malic acid, tartaric acid, citric acid, or a mixture of any of these, for use in topical treatment of warts.

2. Composition for use, according to claim 1, wherein said at least one C1-C4 alkyl ester is ethyl lactate.

3. Composition for use, according to claim 1 or claim 2, for application directly on the warts without puncturing the warts or scraping skin of the warts.

4. Composition for use, according to any of the preceding claims, wherein the total amount (w/w) of formic acid in the composition is 60 – 95%, more preferred 70 – 90%, preferably 80 – 85%.

5. Composition for use, according to any of the preceding claims, wherein said composition comprises 80 – 85% formic acid (w/w); 15 – 20% ethyl lactate (w/w); and substantially no water and/or alcohol.

6. Composition for use, according to claim 4 or 5, wherein said composition is for use on hard warts.

7. Composition for use, according to claim 6, wherein said composition is for use on the palm or the foot sole.

8. Composition for use, according to any one of claims 1 to 3, wherein the total amount (w/w) of formic acid in the composition is 10 – 60%, more preferred 15 – 50%, preferably 20 – 40%, more preferred 30 – 35%.

9. Composition for use, according to claim 8, wherein said composition comprises 30 – 35% formic acid (w/w); 65 – 70% ethyl lactate (w/w); and substantially no water and/or alcohol.

10. Composition for use, according to claim 9, for use on soft warts.

11. Composition for use, according to any one of claims 8 to 10, for use on other sites than the palm or the foot sole.

12. Composition for use, according to claim 11, for use on the back of the foot, the back of the hand, the face, neck, wrists, knees or genitalia.

13. Composition for use, according to any of the preceding claims, which composition comprises less than 15%, preferably less than 10%, more preferred less than 5%, preferably less than 3%, more preferred substantially no water and/or alcohol such as ethanol.

14. Pen for topical administration, comprising a composition for use according to any of the preceding claims.

15. Use of formic acid and at least one C1-C4 alkyl ester of lactic acid, malic acid, tartaric acid, citric acid, or a mixture of any of these, for the manufacture of a composition for the topical treatment of warts.

16. Method of treating warts, comprising topically administering a composition comprising formic acid and at least one C1-C4 alkyl ester of lactic acid, malic acid, tartaric acid, citric acid, or a mixture of any of these, to a patient in need thereof.

17. The method of claim 16, wherein said at least one C1-C4 alkyl ester is ethyl lactate.

18. The method of claim 16, wherein said composition is applied directly on the warts without puncturing the warts or scraping skin of the warts.

19. The method of claim 16, wherein the total amount (w/w) of formic acid in the composition is 60 – 95%, more preferred 70 – 90%, preferably 80 – 85%.

20. The method of claim 16, wherein said composition comprises 80 – 85%; of formic acid (w/w); 15 – 20% ethyl lactate (w/w); and substantially no water and/or alcohol.

21. The method of claim 20, wherein said composition is applied on hard warts.

22. The method of claim 20 or 21, wherein said composition is applied on the palm or the foot sole.

23. The method of claim 16, wherein the total amount (w/w) of formic acid in the composition is 10 – 60%, more preferred 15 – 50%, preferably 20 – 40%, more preferred 30 – 35%.

24. The method of claim 16, wherein said composition comprises 30 – 35% (w/w) of formic acid; 65 – 70% (w/w) of ethyl lactate; and substantially no water and/or alcohol.

25. The method of claim 24, wherein said composition is applied on soft warts.

26. The method of claim 24 or 25, wherein said composition is applied on other sites than the palm or the foot sole.

27. The method of claim 24 or 25, wherein said composition is applied on the back of the foot, the back of the hand, the face, neck, wrists, knees or genitalia.

28. The method of claim 16, wherein, in the composition, there is less than 15%, preferably less than 10%, more preferred less than 5%, preferably less than 3%, more preferred substantially no water and/or alcohol such as ethanol.

29. Composition comprising 30 – 35% formic acid (w/w); 65 – 70% ethyl lactate (w/w); and substantially no water and/or alcohol.

30. Composition comprising 80 – 85% formic acid (w/w); 15 – 20% ethyl lactate (w/w); and substantially no water and/or alcohol.

Claims

1. Composition comprising formic acid and at least one C1-C4 alkyl ester of lactic acid, malic acid, tartaric acid, citric acid, or a mixture of any of these, for use in topical treatment of warts.

2. Composition for use, according to claim 1, wherein said at least one C1-C4 alkyl ester is ethyl lactate.

3. Composition for use, according to claim 1 or claim 2, for application directly on the warts without puncturing the warts or scraping skin of the warts.

4. Composition for use, according to any of the preceding claims, wherein the total amount (w/w) of formic acid in the composition is 60 – 95%, more preferred 70 – 90%, preferably 80 – 85%.

5. Composition for use, according to any of the preceding claims, wherein said composition comprises 80 – 85% formic acid (w/w); 15 – 20% ethyl lactate (w/w); and substantially no water and/or alcohol.

6. Composition for use, according to claim 4 or 5, wherein said composition is for use on hard warts.

7. Composition for use, according to claim 6, wherein said composition is for use on the palm or the foot sole.

8. Composition for use, according to any one of claims 1 to 3, wherein the total amount (w/w) of formic acid in the composition is 10 – 60%, more preferred 15 – 50%, preferably 20 – 40%, more preferred 30 – 35%.

9. Composition for use, according to claim 8, wherein said composition comprises 30 – 35% formic acid (w/w); 65 – 70% ethyl lactate (w/w); and substantially no water and/or alcohol.

10. Composition for use, according to claim 9, for use on soft warts.

11. Composition for use, according to any one of claims 8 to 10, for use on other sites than the palm or the foot sole.

12. Composition for use, according to claim 11, for use on the back of the foot, the back of the hand, the face, neck, wrists, knees or genitalia.

13. Composition for use, according to any of the preceding claims, which composition comprises less than 15%, preferably less than 10%, more preferred less than 5%, preferably less than 3%, more preferred substantially no water and/or alcohol such as ethanol.

14. Pen for topical administration, comprising a composition for use according to any of the preceding claims.

15. Use of a composition comprising formic acid and at least one C1-C4 alkyl ester of lactic acid, malic acid, tartaric acid, citric acid, or a mixture of any of these, in the manufacture of a medicament for the topical treatment of warts.

16. The use of the composition according to claim 15,wherein said at least one C1-C4 alkyl ester is ethyl lactate.

17. Composition for use according to claim 15, wherein said composition is applied directly on the warts without puncturing the warts or scraping skin of the warts.

18. The method of claim 15, wherein the total amount (w/w) of formic acid in the composition is 60 – 95%, more preferred 70 – 90%, preferably 80 – 85%.

19. The use of the composition according to claim 15, wherein said composition comprises 80 – 85%; of formic acid (w/w); 15 – 20% ethyl lactate (w/w); and substantially no water and/or alcohol.

20. Composition for use according to claim 19, wherein said composition is applied on hard warts.

21. The method of claim 19 or 20, wherein said composition is applied on the palm or the foot sole.

22. The method of claim 15, wherein the total amount (w/w) of formic acid in the composition is 10 – 60%, more preferred 15 – 50%, preferably 20 – 40%, more preferred 30 – 35%.

23. The use of the composition according to claim 15, wherein said composition comprises 30 – 35% (w/w) of formic acid; 65 – 70% (w/w) of ethyl lactate; and substantially no water and/or alcohol.

24. Composition for use according to claim 23, wherein said composition is applied on soft warts.

25. The method of claim 23 or 24, wherein said composition is applied on other sites than the palm or the foot sole.

26. The method of claim 23 or 24, wherein said composition is applied on the back of the foot, the back of the hand, the face, neck, wrists, knees or genitalia.

27. The method of claim 15, wherein, in the composition, there is less than 15%, preferably less than 10%, more preferred less than 5%, preferably less than 3%, more preferred substantially no water and/or alcohol such as ethanol.

28. Composition comprising 30 – 35% formic acid (w/w); 65 – 70% ethyl lactate (w/w); and substantially no water and/or alcohol.

29. Composition comprising 80 – 85% formic acid (w/w); 15 – 20% ethyl lactate (w/w); and substantially no water and/or alcohol.