CLAIMS

1. A foaming agent composition for civil engineering-construction materials comprising an anionic surfactant (A), a surfactant aid (B) and a water-insoluble or slightly water-soluble nonionic surfactant (C).

2. The foaming agent composition for civil engineering-construction materials according to claim 1, wherein the anionic surfactant (A) is an anionic surfactant having an alkyl group or alkenyl group with 8 or more and 22 or less carbons.

3. The foaming agent composition for civil engineering-construction materials according to claim 1 or 2, wherein the anionic surfactant (A) is one or more selected from alkyl or alkenyl sulfonic acids having an alkyl group or alkenyl group with 8 or more and 22 or less carbons, alkyl or alkenyl sulfates having an alkyl group or alkenyl group with 8 or more and 22 or less carbons, olefin sulfonic acids whose olefin has 8 or more and 22 or less carbons, polyoxyalkylene alkyl or alkenyl ether sulfates having an alkyl group or alkenyl group with 8 or more and 22 or less carbons, polyoxyalkylene alkyl or alkenyl ether carboxylic acids having an alkyl group or alkenyl group with 8 or more and 22 or less carbons, and salts thereof.

4. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 3, wherein the surfactant aid (B) is a hydrocarbon derivative with 8 or more and 22 or less carbons.

5. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 4, wherein the surfactant aid (B) is one or more compounds selected from monohydric alcohols with 8 or more and 22 or less carbons, and fatty acids with 8 or more and 22 or less carbons.

6. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 5, wherein the surfactant aid (B) is a monohydric alcohol with 8 or more and 22 or less carbons.

7. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 6, wherein the water-insoluble or slightly water-soluble nonionic surfactant (C) is a nonionic surfactant having an alkyl group or alkenyl group with 5 or more and 22 or less carbons.

8. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 7, wherein the water-insoluble or slightly water-soluble nonionic surfactant (C) is a polyether compound and/or polyol having an alkyl group or alkenyl group with 5 or more and 22 or less carbons.

9. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 8, wherein the water-insoluble or slightly water-soluble nonionic surfactant (C) is one or more compounds selected from: polypropylene glycol monoalkyl ethers having one alkyl group with 8 or more and 22 or less carbons and having an

average number of moles of added oxypropylene of 1 or more and 10 or less; and glyceryl ethers having an alkyl group or alkenyl group with 5 or more and 22 or less carbons.

10. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 9, wherein the water-insoluble or slightly water-soluble nonionic surfactant (C) is a glyceryl ether having an alkyl group or alkenyl group with 5 or more and 22 or less carbons.

11. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 10, wherein the anionic surfactant (A) is contained in an amount of 60% by mass or more and 95% by mass or less provided that the total of (A), (B) and (C) is 100% by mass.

12. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 11, wherein the surfactant aid (B) is contained in an amount of 2.5% by mass or more and 20% by mass or less provided that the total of (A), (B) and (C) is 100% by mass.

13. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 12, wherein the water-insoluble or slightly water-soluble nonionic surfactant (C) is contained in an amount of 2.5% by mass or more and 20% by mass or less provided that the total of (A), (B) and (C) is 100% by mass.

14. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 13,

wherein a mass ratio of (B) to (A), (B)/(A), is 0.03 or more and 0.20 or less.

15. The foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 14, comprising water.

16. A bubble-containing hydraulic composition for civil engineering-construction materials comprising: froth obtained by foaming a liquid composition containing the foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 15 and water; and a hydraulic composition.

17. A bubble-containing hydraulic composition for civil engineering-construction materials comprising a hydraulic powder, water, an anionic surfactant (A), a surfactant aid (B) and a water-insoluble or slightly water-soluble nonionic surfactant (C).

18. A method for producing a bubble-containing hydraulic composition for civil engineering-construction materials, the method comprising the following step 1 and step 2:

<step 1>

obtaining froth by foaming a liquid composition containing the foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 15 and water; and

<step 2>

mixing the froth obtained in step 1 with a hydraulic composition containing a hydraulic powder and water.

19. A method for producing a bubble-containing hydraulic composition for civil engineering-construction materials, wherein a hydraulic powder, water, an anionic surfactant (A), a surfactant aid (B) and a water-insoluble or slightly water-soluble nonionic surfactant (C) are mixed to prepare a hydraulic composition containing bubbles.

20. A bubble-containing gypsum slurry for civil engineering-construction materials comprising: froth obtained by foaming a liquid composition containing the foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 15 and water; and gypsum.

21. A bubble-containing gypsum slurry for civil engineering-construction materials comprising gypsum, water, an anionic surfactant (A), a surfactant aid (B) and a water-insoluble or slightly water-soluble nonionic surfactant (C).

22. A method for producing a bubble-containing gypsum slurry for civil engineering-construction materials, the method comprising the following step 1 and step 2:

<step 1>

obtaining froth by foaming a liquid composition containing the foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 15 and water; and

<step 2>

mixing the froth obtained in step 1 with a gypsum slurry containing gypsum and water.

23. A bubble-containing soil composition for civil engineering-construction materials comprising: froth obtained

by foaming a liquid composition containing the foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 15 and water; and soil.

24. A bubble-containing soil composition for civil engineering-construction materials comprising soil, water, an anionic surfactant (A), a surfactant aid (B) and a water-insoluble or slightly water-soluble nonionic surfactant (C).

25. A method for producing a bubble-containing soil composition for civil engineering-construction materials, the method comprising the following step 1 and step 2:

<step 1>

obtaining froth by foaming a liquid composition containing the foaming agent composition for civil engineering-construction materials according to any one of claims 1 to 15 and water; and

<step 2>

kneading soil with the froth obtained in step 1.

26. A method for producing a foaming agent composition for civil engineering-construction materials, wherein an anionic surfactant (A), a surfactant aid (B) and a water-insoluble or slightly water-soluble nonionic surfactant (C) are mixed.

27. Use of a composition containing an anionic surfactant (A), a surfactant aid (B) and a water-insoluble or slightly water-soluble nonionic surfactant (C) as a foaming agent composition for civil engineering-construction materials.

28. A method for stabilizing froth for civil engineering-construction materials, wherein a surfactant aid (B) and a

water-insoluble or slightly water-soluble nonionic surfactant (C) are used together with an anionic surfactant (A) when producing froth for civil engineering-construction materials from the anionic surfactant (A) and water.