CLAIMS

1. A liquid cleaning agent composition for hard surfaces, comprising:

(a) a monoalkyl ether of a polyalkylene glycol represented by the following formula (a1):

$$R^{1a}(OR^{2a})_lOH \qquad (a1)$$

wherein R^{1a} is an alkyl group having 4 to 8 carbon atoms, l is the number of from 1 to 4, and R^{2a} is an alkylene group having 2 to 4 carbon atoms;

(b) an amine oxide;

(c) one or more members selected from the group consisting of fatty acids having 8 to 18 carbon atoms and salts thereof in an amount of from 0.001 to 15% by mass, provided that the mass in a case of a salt is calculated as the mass in an acid form; and

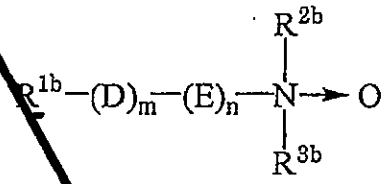
water,

wherein a mass ratio of the component (c) / (the component (b) + the component (c)) is from 0.001/1 to 1/1, and wherein 60 to 100% by mass of the component (a) is a monoalkyl ether of dipropylene glycol (a-1) of which alkyl group has 4 to 8 carbon atoms,

wherein its pH at 25°C is 9 or more and 14 or less.

2. The composition according to claim 1, wherein a mass ratio of the component (a) / (the component (b) + the component (c)) is from 1/1 to 15/1.

3. The composition according to claim 1 or 2, wherein the component (b) is an alkylamine or alkenylamine oxide represented by the following general formula (b1):



(b1)

wherein R^{1b} is a hydrocarbon group having 8 to 18 carbon atoms, each of R^{2b} and R^{3b}, which may be identical or different, is an alkyl group having 1 to 3 carbon atoms, D is an -NHC(=O)- group or a -C(=O)NH- group, E is an alkylene group having 1 to 5 carbon atoms, and m and n are m=0 and n=0, or m=1 and n=1.

4. The composition according to any one of claims 1 to 3, wherein the component (b) is an alkyldimethylamine oxide, of which alkyl group has 8 to 18 carbon atoms.

5. The composition according to any one of claims 1 to 4, wherein the composition contains, as a component (d), an alkanolamine and/or an alkali hydroxide in an amount of from 0.01 to 20% by mass.

6. The composition according to any one of claims 1 to 5, wherein the composition contains the component (d) in an amount of from 5 to 6% by mass of the composition.

7. The composition according to any one of claims 1 to 6, wherein the component (a-1) is dipropylene glycol monobutyl ether.

8. The composition according to any one of claims 1 to 7, wherein the component (b) is contained in an amount of from 0.05 to 15% by mass.

9. The composition according to any one of claims 1 to 8, wherein the component (a) consists of a component (a-1).

10. The composition according to any one of claims 1 to 9, wherein the component (a) is contained in an amount of from 1 to 15% by mass.

11. The composition according to any one of claims 1 to 10, wherein a mass ratio of the component (c) / (the component (b) + the component (c)) is from 0.003/1 to 0.6/1.

12. The composition according to any one of claims 1 to 11, wherein water is contained in an amount of from 70 to 98% by mass.

13. The composition according to any one of claims 1 to 12, wherein the composition has a pH at 25°C of 10 or more and 13 or less.

14. The composition according to any one of claims 1 to 13, wherein the composition has a pH at 25°C of 11 or more and 13 or less.

15. The composition according to any one of claims 1 to 14, wherein the composition has a pH at 25°C of from 11 to 11.5.

16. The composition according to any one of claims 1 to 15, wherein the composition is present in the form of a homogeneous liquid phase.

17. The composition according to any one of claims 1 to 16, wherein the composition is applicable as a kitchen cleaning agent.

18. A cleaning method including applying the composition as defined in any one of claims 1 to 17 to a hard surface on which grease stains are present to clean the hard surface.

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(b) an amine oxide;

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wherein a mass ratio of the component (c) / (the component (b) + the component (c)) is from 0.001/1 to 1/1, and wherein 60 to 100% by mass of the component (a) is a monoalkyl ether of dipropylene glycol (a-1) of which alkyl group has 4 to 8 carbon atoms,

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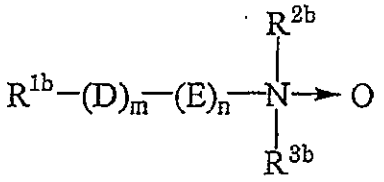

(b1)

wherein R^{1b} is a hydrocarbon group having 8 to 18 carbon atoms, each of R^{2b} and R^{3b}, which may be identical or different, is an alkyl group having 1 to 3 carbon atoms, D is an -NHC(=O)- group or a -C(=O)NH- group, E is an alkylene group having 1 to 5 carbon atoms, and m and n are m=0 and n=0, or m=1 and n=1.

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16. The composition according to any one of claims 1 to 15, wherein the composition is present in the form of a homogeneous liquid phase.